DIGI®
When Accuracy Counts

DC-150

Counting Scale

Operation Manual

RICE LAKE WEIGHING SYSTEMS
Industrial Solutions on a Global Scale®

ISO 9001 REGISTERED

73346

GENERAL SPECIFICATIONS

1.1 MODE FLOW CHART

1.2 SPECIFICATION

1.3 OVERALL VIEW

1.4 LABEL FORMAT AND LABEL SET UP

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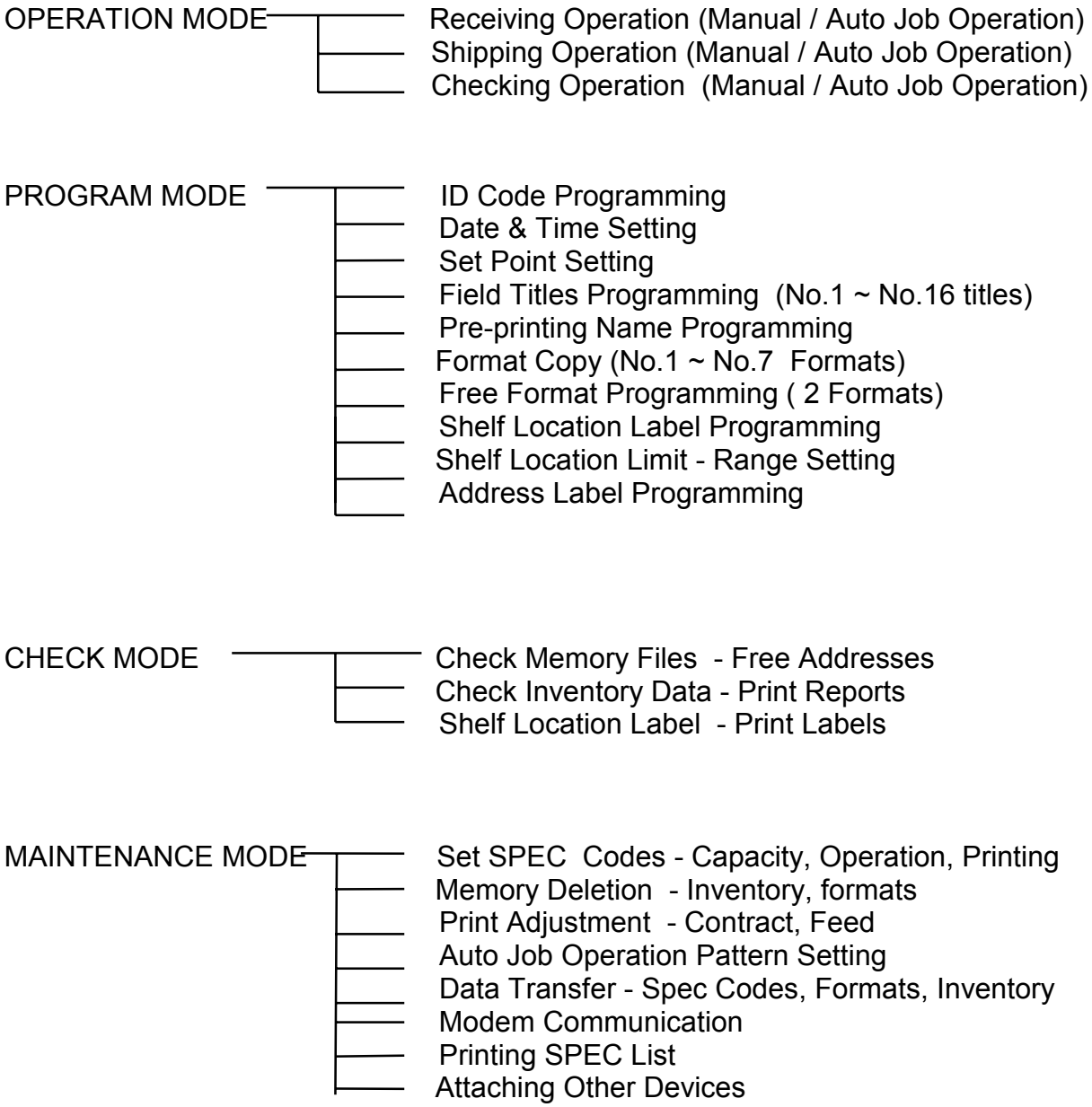
1.0. GENERAL

1.0.1 DESCRIPTION

The DC-150 counting scale offers a practical solution to a full range of precision counting applications. There are a variety of models available ranging from a weight capability of 0.5 lb. through 100 lb. utilizing an internally mounted load cell and a full range from 0.5 to 50,000 lb. on an external second or third channel. A console model is also available with 1 or 2 external platforms in any of the above mentioned capacities in any combination.

This instruction manual will provide the user with all the information necessary to understand, set-up and operate the DC-150 scale. Included in this manual are descriptions, specifications, drawings, and operating instructions.

1. MODE FLOW CHART


OPERATION MODE
Receiving Operation (Manual / Auto Job Operation)
Shipping Operation (Manual / Auto Job Operation)
Checking Operation (Manual / Auto Job Operation)
PROGRAM MODE
ID Code Programming
Date & Time Setting
Set Point Setting
Field Titles Programming (No.1 ~ No.16 titles)
Pre-printing Name Programming
Format Copy (No.1 ~ No.7 Formats)
Free Format Programming (2 Formats)
Shelf Location Label Programming
Shelf Location Limit - Range Setting
Address Label Programming
CHECK MODE
Check Memory Files - Free Addresses
Check Inventory Data - Print Reports
Shelf Location Label - Print Labels
MAINTENANCE MODE
Set SPEC Codes - Capacity, Operation, Printing
Memory Deletion - Inventory, formats
Print Adjustment - Contract, Feed
Auto Job Operation Pattern Setting
Data Transfer - Spec Codes, Formats, Inventory
Modem Communication
Printing SPEC List
Attaching Other Devices

SPECIFICATION - Version 2.00

1.1 MODEL CAPACITIES

All Weight in Pounds

Optional MODEL Apparatus	Capacity	Resolutions Wgt.	Counting	Platform Dimensions	Scale	Remote
	0.5	0.0001	0.000001	6” x 8”		
	1.0	0.0001	0.000002	6” x 8”		
	2.5	0.0002	0.000005	7” x 10”		
151L	5.0	0.0005	0.00001	12” x 14”		
	10.0	0.001	0.00002	12” x 14”	NO	YES
	25.0	0.002	0.00005	12” x 14”		
	50.0	0.005	0.0001	12” x 14”		
	100.0	0.01	0.0002	12” x 14”		
REMOTE PLATFORMS						
	250.0	0.02	0.0005	17” x 21”		
	500.0	0.05	0.001	17” x 21”		
	1000.0	0.1	0.002	24” x 28”		
152L	2500.0	0.2	0.005	36” x 36”		YES
YES						
&	5000.0	0.5	0.01	48” x 48”		
153L	10000.	1.0	0.02	60” x 60”		
	25000.	2.0	0.05	48” x 72”		
	50000.	5.0	0.1	60” x 84”		

Capacity Scale 1	Capacity Scale 2	Sample Platform	Bulk Platform		
0.5	5.0	4” x 6”	9” x 12”		
1.0	5.0	4” x 6”	9” x 12”		
152D 1.0	10.0	4” x 6”	9” x 12”		
& 1.0	25.0	4” x 6”	9” x 12”	NO	YES
153D 1.0	50.0	4” x 6”	9” x 12”		
2.5	10.0	4” x 6”	9” x 12”		
2.5	25.0	4” x 6”	9” x 12”		
2.5	50.0	4” x 6”	9” x 12”		

DC-153C console only has all remote platforms, any capacity.
Remote platforms can be any dimension OR capacity necessary to satisfy the application. Ramps, bumper guards, meter stands and pit installation kits are available.
Stainless Steel and Aluminum construction are available.

2. SCALE SPECIFICATIONS

* WEIGHING DEVICE : Cantilever Load Cell
* DISPLAY DEVICE : Fluorescent Display
* COUNT RESOLUTION : 1/500,000
* WEIGHT RESOLUTION : 1/10,000 , 1/5,000 , 1/2,500

3. MEMORY SPECIFICATIONS

* STANDARD 385 ITEM MEMORY.
* OPTIONAL Expanded 3,080 ITEM MEMORY.

4. INTERFACE VARIATION

* INTERFACES FOR REMOTE APPARATUS

TYPE OF PORT	USES	REMARKS
RS-232C-1(8PIN) - DIN	MODEM/DATA RECORDER	STANDARD
RS-232C-2 (8PIN) - DIN	BAR CODE LASER SCANNERS	OPTION
RS-232C-3 (8PIN) - DIN	EXTERNAL PRINTER	
TTL OUTPUT (8PIN) or RS-422 (8PIN)	SET POINT OUTPUT	
KEY BOARD I/F	KEY BOARD (IBM-AT)	

* OPTIONAL INTERFACES FOR REMOTE LOAD CELLS

TYPE OF PORT	USES
REMOTE LOAD CELL -1 15 Pin Amphenol	FOR REMOTE CELL PLATFORM
REMOTE LOAD CELL -2 15 Pin Amphenol	FOR REMOTE CELL PLATFORM

5. DISPLAY SPECIFICATION

* 20 DIGITS (5 X 7 DOTS) Fluorescent DISPLAY
* WEIGHT : 5 DIGITS + MINUS SIGN
* UNIT WEIGHT : 5 DIGITS + DECIMAL
* QUANTITY : 6 DIGITS

6. KEYBOARD - WITH AUDIBLE & TACTILE RESPONSE

* MULTI-FUNCTION KEYS
* FULL ALPHA-NUMERIC KEY ARRAY
* DUST PROOF SEALED PANEL

7. PRINTER

THERMAL DIRECT PRINT

* 0.135 mm x 0.135 mm SQUARE DOT HEAD
* 66 mm WIDE HEAD = (2.5")
* 448 DOTS/LINE IN/PER/MIN SPEED
* AUTO ALIGNING LABEL
* LABEL PEEL BAR
* TAKE-UP REEL
* CASSETTE LOADING
* PAPER CUTTER
* LABELS OR PAPER STOCK

8. ELECTRICAL REQUIREMENT

		STANDARD	OPTIONAL
* OPERATION VOLTAGE	:	117	220, 230, 240 Vac
* OPERATING FREQUENCY	:	60 Hz	50 Hz
* POWER CONSUMPTION	:	15 W	
* CABLE LENGTH	:	6 FOOT	

9. ENVIRONMENTAL REQUIREMENT

* OPERATING TEMPERATURE	:	0 ~ 40C (-4F ~ 104F)
* OPERATING HUMIDITY	:	15% TO 85% RH

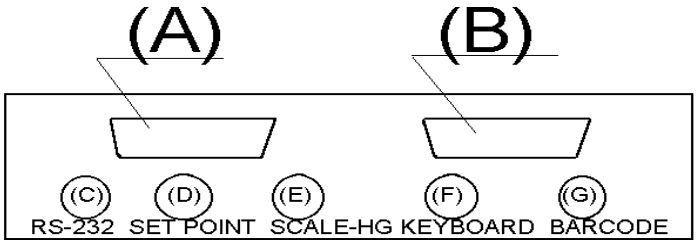
10. DIMENSION

* OVERALL - WIDTH x DEPTH x HEIGHT
  16.14(W) x 16.06 (D) x 6.2 (H) inches
  410(W) x 498 (D) x 158 (H) mm

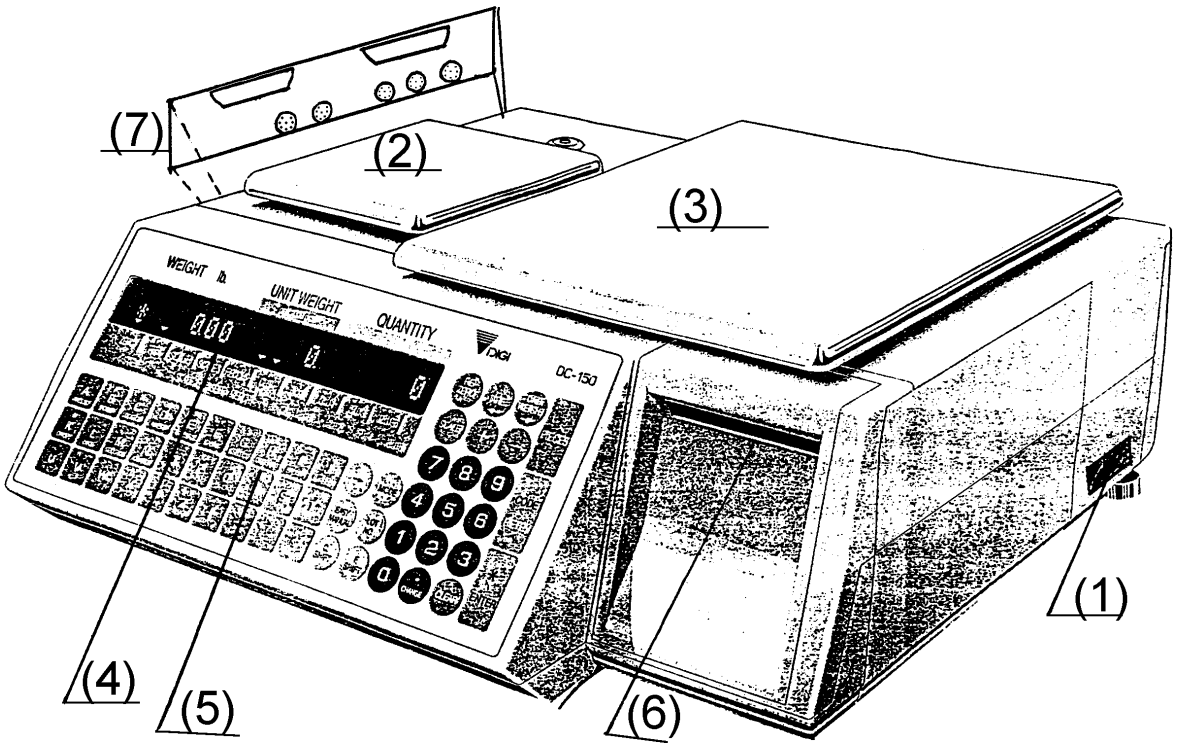
* TOTAL WEIGHT : 11.2kg (24.lb.)

2. OVERALL VIEW

SIDE VIEW



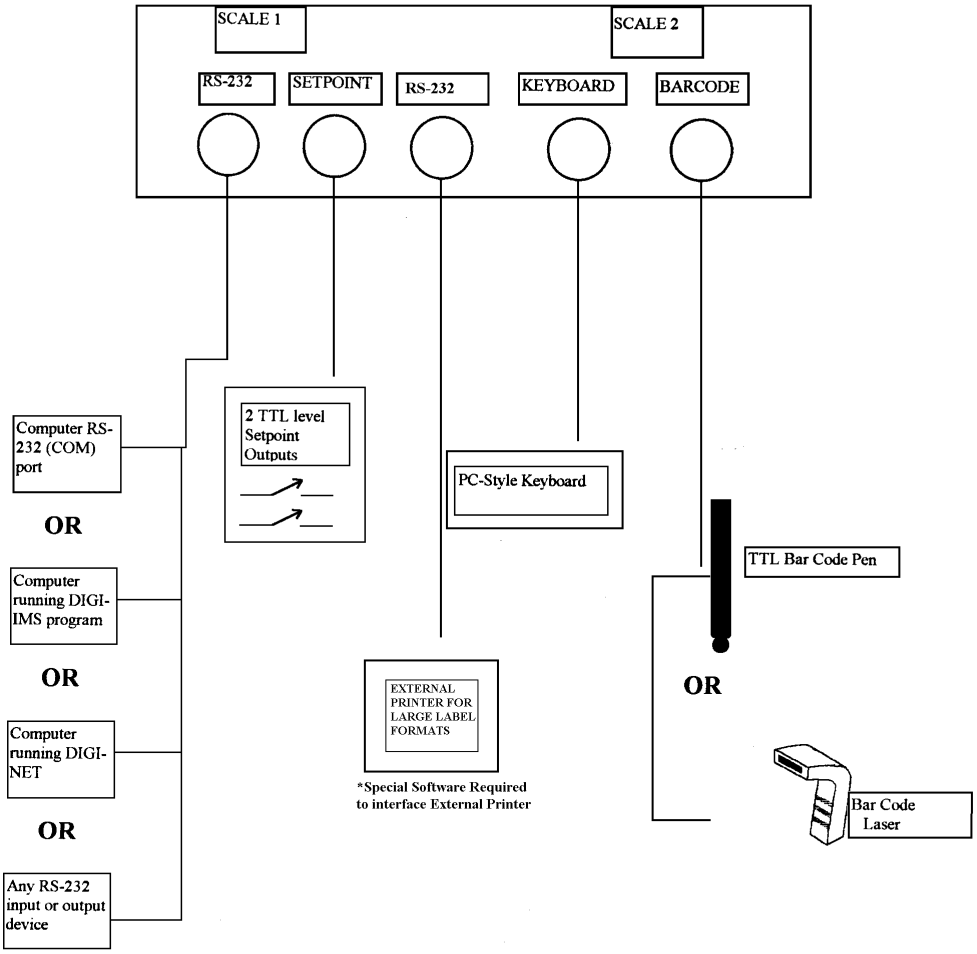
3. NAME OF EACH PART



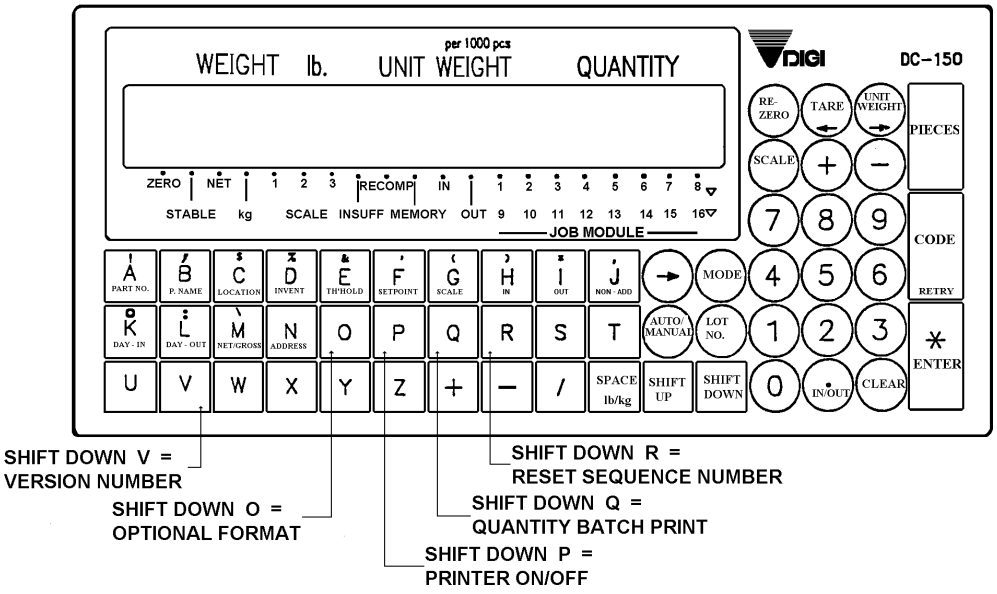
1. MAIN SWITCH
2. SCALE 1
3. SCALE 2
4. DISPLAY WINDOW
5. OPERATION KEYS
6. PRINTER
7. CONNECTOR PANEL

A. REMOTE LOAD CELL -1 or 3
B. REMOTE LOAD CELL-2
C. PC COMMS / MODEM
D. SET POINT OUTPUT
E. SECONDARY RS-232
F. IBM KEY BOARD
G. PEN/LASER SCANNER

DC-150 Input/Output Ports

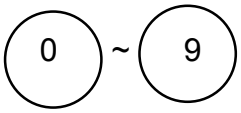


4. DISPLAY and KEYBOARD



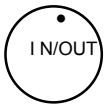
INDICATORS	MEANINGS
ZERO	Weight is zero
STABLE	Weight is stable
NET	Presence of a tare weight
KG	Scale weighing in kg mode.(Default is lb. mode.)
SCALE 1~3	Scale Platform that is in use
INSUFF	Sample size is too small to calculate Unit Weight
RECOMP.	Unit weight may be recalculated by pressing PIECES key.
MEMORY	An accumulated total is in memory
IN	Quantities being added to inventory and movement data
OUT	Quantities being removed to inventory and movement data
JOB MODULE1~8 (9~16)	Auto job pattern operation 9~16 will flash when in process of auto job operation.

1.3.3 FUNCTION OF KEYS



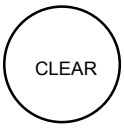
NUMERIC KEYS

Key numerical values into the system.



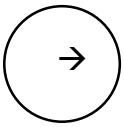
DECIMAL POINT

Enter decimal point when entering data
Toggle between in, out, non add operation together with [SHIFT DOWN] key in operation mode.



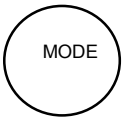
CLEAR

Clear keyed-in data from display.
Delete the data in memory file.



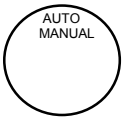
FEED

Feed paper



MODE

Toggles between FOUR modes. Operation, Program, Check, Maintenance.
Exits modes without saving data.

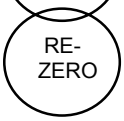


AUTO / MANUAL

Toggles between Auto Job Operation and Manual Operation in OPR. mode.
Back to the precious screen in programming data.

LOT NUMBER

Enter the key-in data to LOT No. in OPR mode.



RE-ZERO

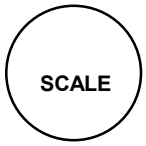
Eliminates weight from the weight dispaly with no tare and causes it to show a true zero. Re-Zero “V” shows software version any mode.

TARE

Enter a tare value into the system.
Toggles the data files to program or access
Move the triangle cursor to Left.

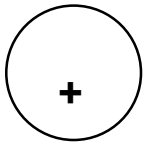
UNIT WEIGHT

Enter weight per 1000 count of pieces or is pressed after enter a weight value.
Toggles the data files to program or access
Move the triangle cursor to Right.



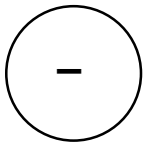
SCALE

Toggles between the scales, if the system is with pural scales.



PLUS

Weight data addition and print out
In Maintenance mode, advances to the next choice, when the triangle cursor is blinking.

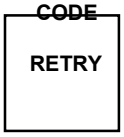


MINUS

Weight data subtraction and print out
In Maintenance mode, moves back to the previous choice, when the triangle cursour is blinking.

PIECES

Sample entry in counting mode to calculate UNIT WEIGHT. Automatic 10 pieces or key enter any other sample quantity placed on platter

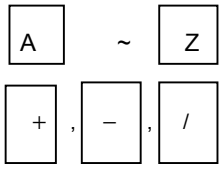


CODE

Calls ITEM data from memory file.
Reprints the same label without saving inventory total in OPR. Mode. (SD / code)
Prints TEST LABEL (TOTAL LABEL) in programming FREE FORMAT.

ENTER

Print total accumulation in OPR. mode.
Enters set up choices and advances to next choice. Then, at the end of choices,store the data into memory files.



ALPHABET / PLUS / PLUS / MINUS / SLASH

Key alphabetical data into the system.
Assign the data to ITEM FILES together with [SHIFT DOWN] key.

NOTE * ✍[Y] key is used for executing the deletion in the deletion screen.
* ✍[N] key is used for escaping the deletion screen.
* ✍[M] key is used for test printing (gross label) in free format setting.

SPACE

lb / kg

SPACE

Enters SPACE in alphabetical data entry.
Toggles the display between pound (lb) and kilogram (kg). This function is available in LB version.
Prints TEST LABEL (ITEM LABEL) in programming FREE FORMAT

SHIFT DOWN

SHIFT DOWN + *DESIGNATED KEY*

Change the key functions to the lower line of Alphabet keys.

1. **A = ENTER TEMPORARY PART NUMBER**
2. **B = ENTER TEMPORARY PART NAME**
3. **C = SEE SHELF LOCATION**
4. **D = SEE INVENTORY BALANCE**
5. **E = SEE THRESHOLD ORDER POINT**
6. **F = SEE SET POINT QTY & PRECENTAGE**
7. **G = SEE SCALE PLATFORM**
8. **H = AUTO JOB PATTERN FOR RECEIVING "IN"**
9. **I = AUTO JOB PATTERN FOR SHIPPING "OUT"**
10. **J = AUTO JOB PATTERN FOR NON-ADD**
11. **K = SEE DAY QTY IN**
12. **L = SEE DAY QTY OUT**
13. **M = SWITCH NET / GROSS WEIGHT**
14. **N = SELECT ADDRESS/ MEMO TO PRINT [1-10 / SD / N / *]**
15. **O = SELECT FORMAT TO PRINT 1-7 [1- 7 / SD / O / CLEAR / *]**
16. **P = PRINTER TURNED ON or OFF [NO INDICATOR LAMP]**
17. **Q = BATCH PRINT LABELS TO 999 EACH [QTY / SD / Q / CLEAR / *]**
18. **R = RESET SEQUENCE NUMBER [NO / SD / R =CONTINUOUS]**
19. **V = VERSION NUMBER [REZERO V IN ANY MODE , VER.2.00 AND ABOVE]**
20. **SPACE = TOGGLE "LB / KG " CONVERT MODE**
21. **CODE = RETRY - PRINT ADDITIONAL LABEL**
22. **" ." = TOGGLE INVENTORY ACTIVITY "IN / OUT / NON-ADD "**
23. **= STOP PRINTING AFTER FIELD COMPLETE**
24. **LOT NO=PRESS TWICE TO DELETE LOT NUMBER**

SHIFT UP

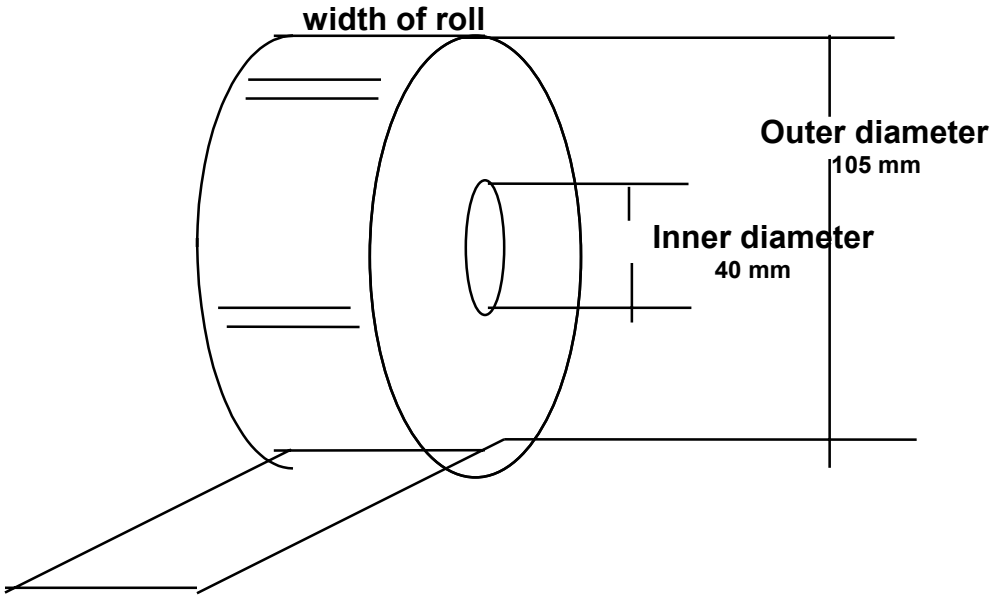
SHIFT UP

Change the key functions to enter special characters from the upper line on Alphabet keysheet. Punctuation in any A/N field.

5. LABEL SIZE AND SET UP

6. SPECIFICATION OF LABELS AND RECEIPT PAPER

Outer diameter of rolls : 105 mm = 4-1/4”
Inner diameter of rolls : 40 mm = 1- /8”
Width of receipt rolls : 66 mm = 2-11/16”
Width of label rolls : 66 mm = 2-11/16”
Width of label Stock : 64 mm = 2-9/16”



7. STANDARD LABEL FORMAT

DC-150 has 7 standard label formats and 2 free label formats.
Select the label format in PRINT SPEC in maintenance mode.

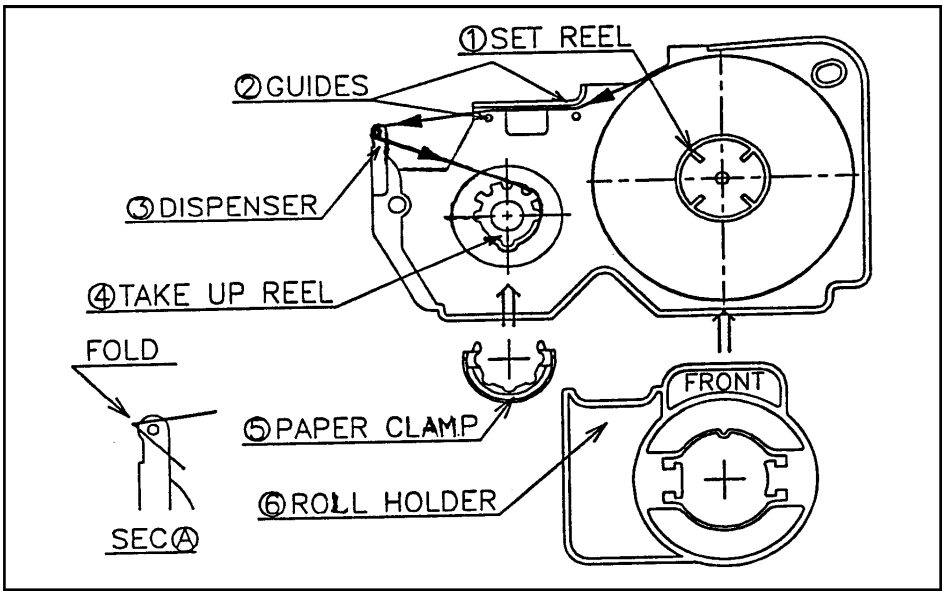
THREE TYPES OF LABELS CAN BE PRINTED IN OPERATION MODE.

ITEM LABEL	.....	Issued in single operation
TOTAL LABEL	.....	Issued in multiple operation
GROSS LABEL	.....	Issued in gross weight operation

NOTE: Refer to APPENDIX **I** to see the samples of standard formats.
Label Quantity: 55mm = 500 labels
77mm = 350 labels
120mm = 250 labels

8. LABEL & PAPER ROLL SET UP

1. Remove front panel of printer.
2. Release thermal head block by pulling down the plastic lock.
3. Open the right side door of printer block by pushing in panel & releasing.
4. Pull out label cassette from the main unit.
5. Twist the roll holder ❻ 45 degree clockwise and pull it out to remove.
6. Take out the empty roll core and replace with a new roll.
7. In case of label, take the end of the label stock and run it above the guides ❷ and through dispenser ❸ and lock backing paper on take up reel ❹ with paper clamp❺.
8. Replace by pushing roll holder ❻into set reel❶ as drawing, until it stops.
9. Set label and paper switch on the inside of label cassette.
   [LEFT (label) ↔ RIGHT(paper)]
10. Slide cassette into the main unit, align the metal dispenser ❸ shaft under the thermal head.
11. Close the thermal head block by pushing the top of the plastic lock.
12. Close the side panel and replace the front panel of printer.
13. Align & adjust tension of the label roll by pressing **[→] (feed)** Key
14. In the case of paper, install paper roll the same as label stock
15. Fold the end of the paper and hold the fold on dispenser ❸ .
16. Replace the cassette into the main unit and close the thermal head block the same as label stock.
17. Align the paper by pressing **[→] (feed)** key



9. GENERAL EXPLANATION

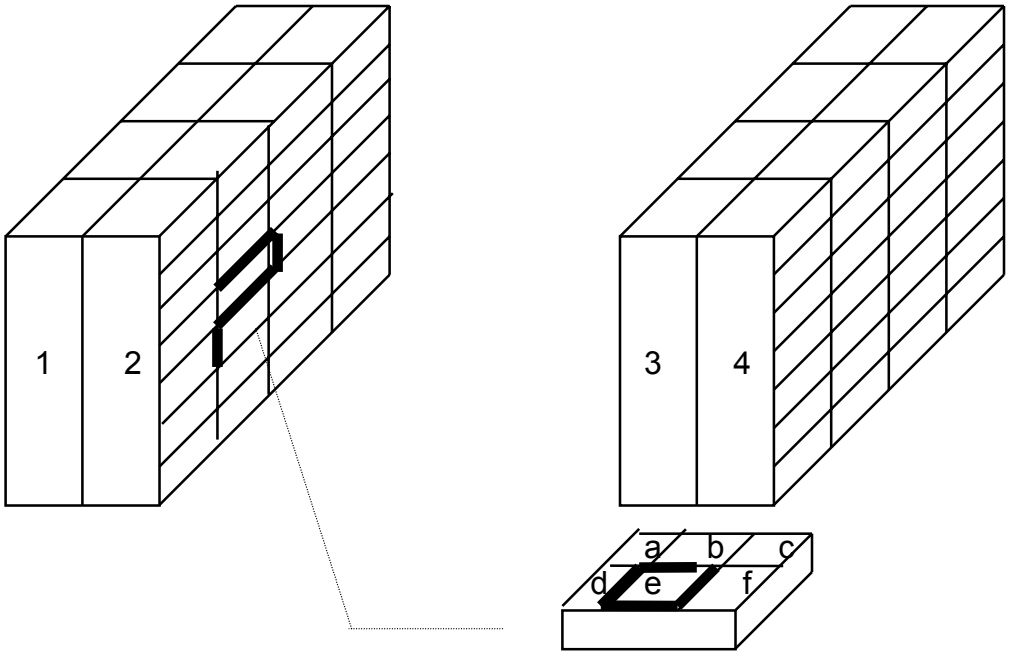
10. OVERVIEW OF SHELF LOCATION PATTERN.

The shelf location number for each inventory item can be programmed into the DC-150 and labels can be printed for each shelf location.

The Location of parts can be identified with EIGHT AlphaNumeric digits. The first 2 digits are fixed for scale number. The remaining 6 digits identify the following GRID:

0 1 - 0 2 - 0 2 - 4 - E

SCALE - ROW - RACK - SHELF - BIN



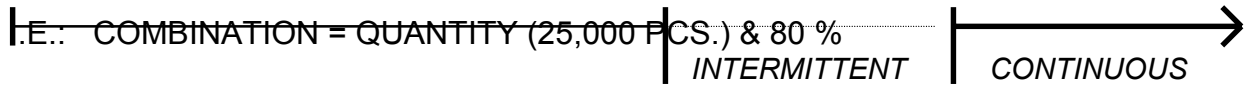
Note 1)✍ Only ONE shelf location number can be assigned to a part.
Note 2) ✍AlphaNumeric Grid default is set to “01-ZZ-ZZ-Z-Z “ which allows any combination of A/N characters.

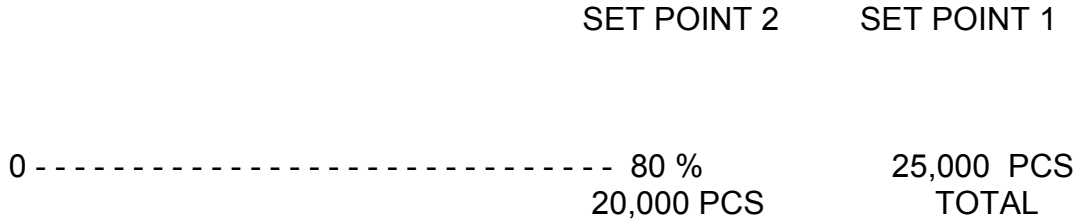
11. OVERVIEW OF SET POINT OUTPUT

Two target values can be programmed for each ID CODE in Memory. A beep sounds to indicate when the target value is reached. (SET1/SET2.)

The combination of SET1 and SET2 can be selected as follows in Maintenance mode.

COMBINATION	SET POINT 1	SET POINT 2
QUANTITY & PERCENTAGE	QUANTITY	% OF SET POINT 1
QUANTITY & PERCENTAGE (TO STOP	QUANTITY	% OF SET POINT 1
WEIGHT & PERCENTAGE	WEIGHT(g)	% OF SET POINT 1
UPPER LIMIT & LOWER LIMIT OF WEIGHT	UPPER LIMIT	LOWER LIMIT
UPPER LIMIT & LOWER LIMIT OF QUANTITY	UPPER LIMIT	LOWER LIMIT





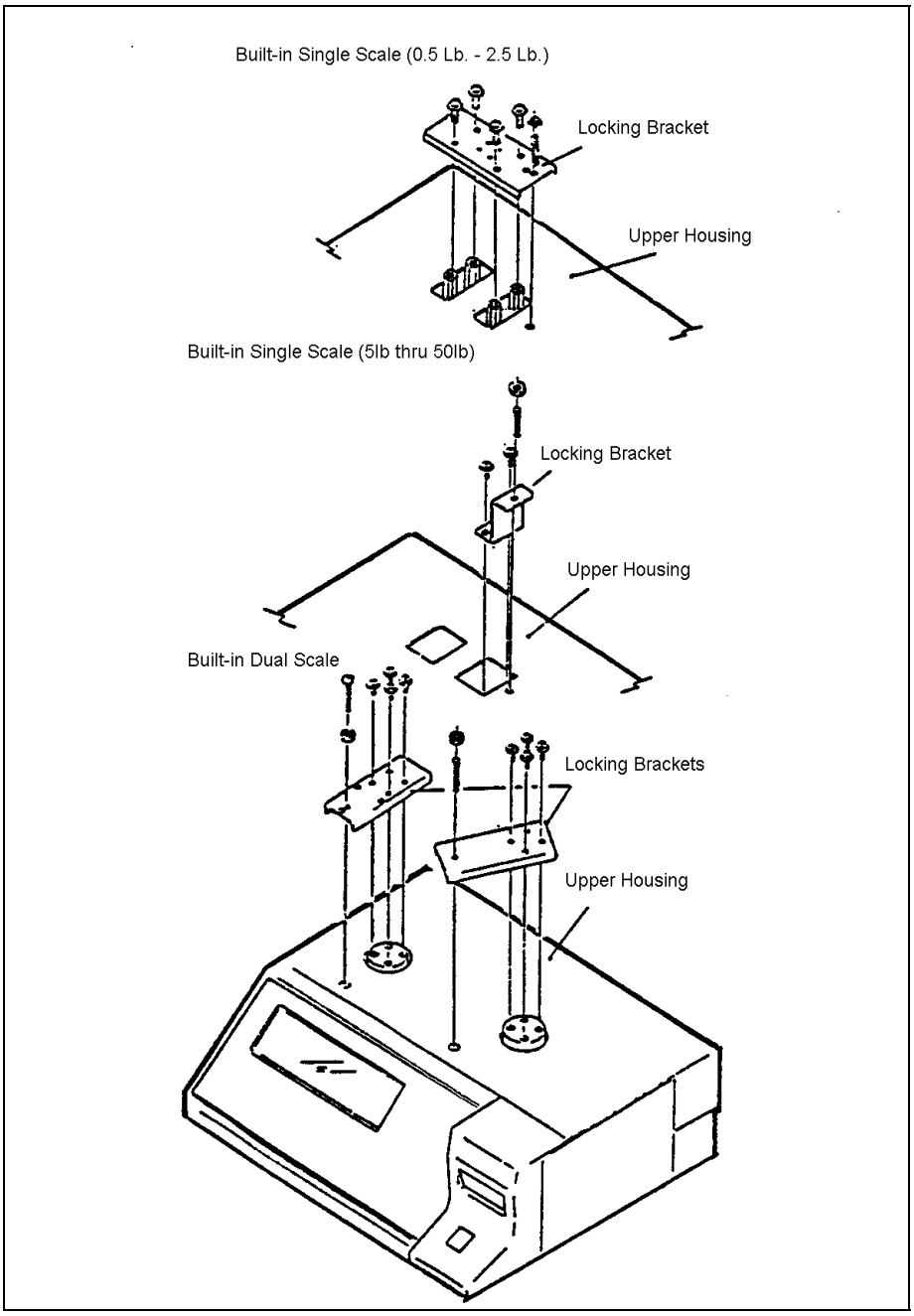
* When the weight value is a equal to (or over) the target SET1, intermittent buzzer sounds. When the weight value is a equal to (or over) the target SET2, buzzer change to continuous.

12. REMOVE THE LOCKING SCREW FOR LOAD CELL

The **load cell is locked** with socket screw and nut **during transportation**. Please remove the locking screw, nut and the metal plate during set up as shown in the following drawing.

1.1. When setting up, release the load cell
a. Loosen the lock nut.
b. Remove socket screw.
c. Remove 4 screws and the metal plate.

1.2. Before transportation, mount load cell lock.
a. Set metal plate with 4 screws.
b. Set the socket screw until it touches the load cell and tighten up one revolution.
c. Tighten the lock nut.



NOTE : ✍ When Shipping DC-150 Be Sure To Lock Scale As Shown Or Permanent Damage May Occur To Load Cell That Would Require Non-Warranty Replacement.

NOTE : ✍ When calibration cannot be performed correctly, please check to see whether all the screws have been removed.

13. SOFTWARE VERSION RECALL (Ver. 2.00 and above)

Software Version recall may be used on any DC-150 with software version 2.00 and above.

1. Press **[MODE]** key.
Any Mode may be displayed.

OPERATION MODE

2. Press **[REZERO]** & **[V]** key at the same time. the version number will be displayed for several seconds then return to whichever mode was previously displayed.

Ver. D2.00

OPERATION MODE

14. STOP PRINTING ENTRY

Any time when printing reports or spec list you wish to stop printing
Press and the **[→] (feed)**key in until printing stops then release.

15. TOGGLE INVENTORY (IN / OUT / NON-ADD)

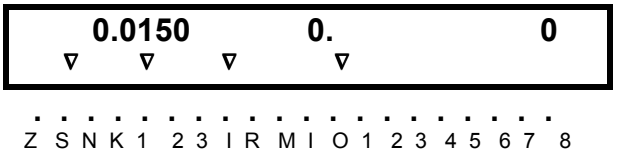
TO TOGGLE BETWEEN IN / OUT / NON-ADD
Press **[SHIFT DOWN]** key followed by the **[•]** within 3 seconds.

NOTE: ✍An indicator light will show 'IN' AND 'OUT'. No light will light for 'NON-ADD'.

Unit Weight Entry

16. Unit Weight Entry by Sampling

1. Place sample pieces on scale.
   Ex.) 0.015kg

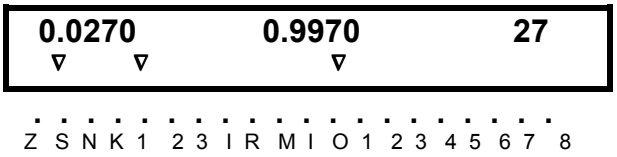


2. Enter sample number with numeric keys.
   *1 Ex) 15

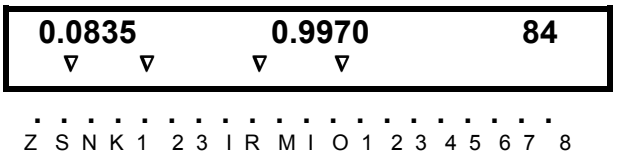
3. Press **[PIECES]** key. *2

   (The number of pieces needed appears in display.)

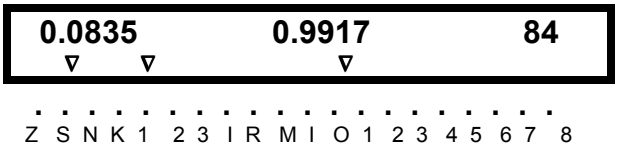
4. Add the required pieces and press **[PIECES]** key again.



5. Add additional pieces - double the first sample to enhance UW calculation. *3



6. Press **[PIECES]** key.



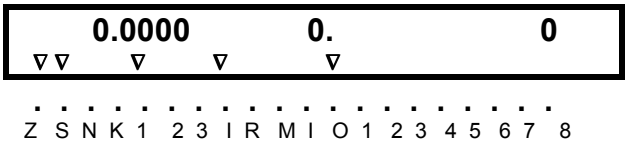
NOTE: *1) ✍ If using a sample of 10 pcs., press PIECES key without entering a number of sample.

NOTE: *2) ✍ To have accurate unit weight calculation, the sample weight must be more than the insufficient range of the scale. (Insufficient range = 0.0% ~ 0.7 % of scale capacity) If sample weight is less than the range, the number of pieces required for accurate sampling would be displayed in PROCEDURE 3.

NOTE: *3) ✍ When the unit weight is developed though sampling, the accuracy can be improved by increasing the sample size using recomputing feature. This function works only when the “RECOMP” sign lit.

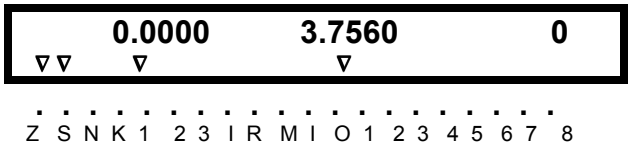
17. Unit Weight Entry by Numeric Keys

1. *Stand-by Status*



2. Enter Unit Weight Value with numeric keys
   Ex.) 3.756kg / 1000 pcs.

3. Press **[UNIT WEIGHT→]** key. *1



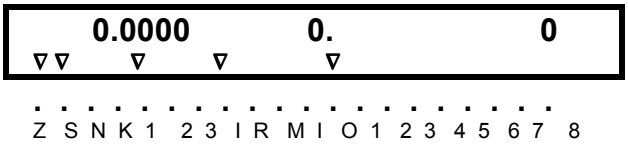
Note: *1) ✍The unit weight value should be Unit Weight/1,000.

Note: 2) ✍ To clear unit weight, press [0] and [UNIT WEIGHT] key.

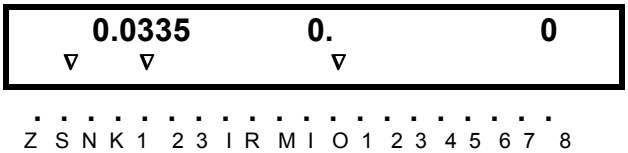
18. Tare Weight Entry

19. One Touch Tare Entry

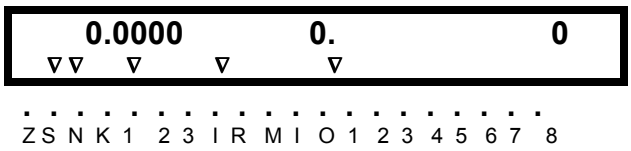
1. *Stand-by Status*



2. Place tare weight on platter
   Ex.) 0.0335kg



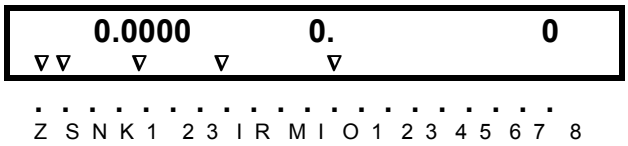
3. Press **[←TARE]** key.



Note : ✍ To clear tare weight, enter [0] and press [TARE] key.

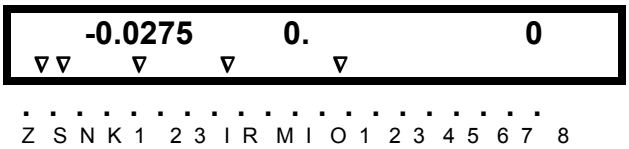
20. Tare Entry by Numeric Keys

1. *Stand-by Status*



2. Enter Tare Weight Value with numeric keys
   Ex.) 0.0275

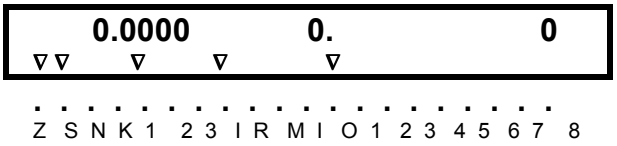
3. Press **[←TARE]** key.



Note : ✍ To clear tare weight, enter [0] and press [TARE] key.

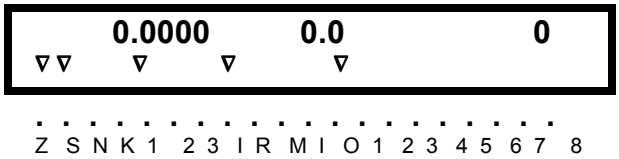
21. Part Number Entry

1. *Stand-by Status*



2. Enter Part No.
   Ex.) 1233 - 44k (Capacitor)

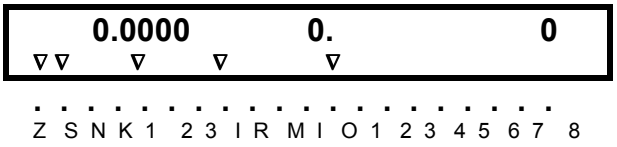
3. Press the **[SHIFT DOWN]** key then press the **[A PARTNO.]** key within 3 seconds.



Note :✍ The parts no. will be cleared automatically by entering another ID Code.

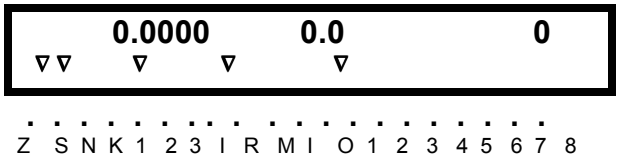
22. Part Name Entry

1. *Stand-by Status*



2. Enter Part NAME
   Ex.) 1233 - 44k (Capacitor)

3. Press the **[SHIFT DOWN]** key then press the [**B P NAME**] key within 3 seconds.

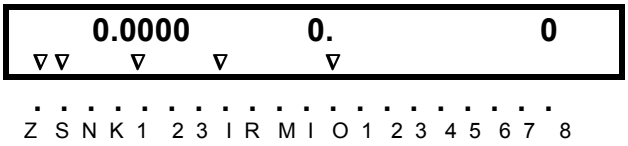


4. Press **[CLEAR]** key returns scale to weighing mode

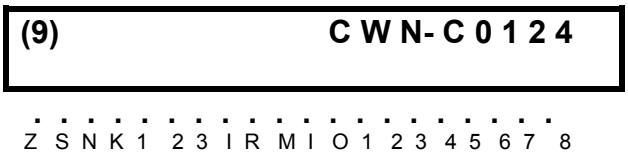
Note : ✍ The part name will be cleared automatically when entering another ID Code.

23. Lot Number Entry

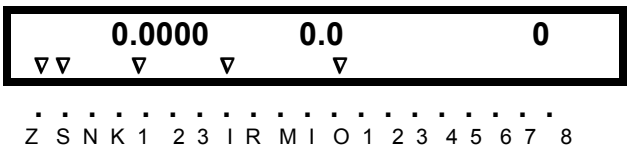
1. *Stand-by Status*



2. Enter Lot No.
   Ex.) CWN-CO124



3. Press **[LOT NO.]** key.



Note: ✍MISC. SPECS : SPEC 02 KEEP LOT NO. Select - Y or N
(Spec 02 set to Y or N) Lot no. cleared by pressing LOT NO. key twice, then the Y key.
(Spec 02 set to N) Lot no. will be cleared automatically by entering another ID Code

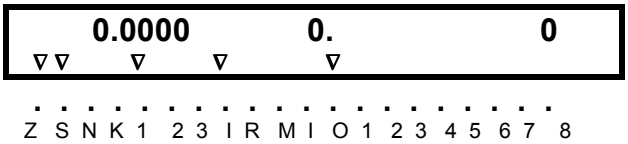
1.9.2 Printer Turn Off / On

1. Turn Printer Off	**Press [SHIFT DOWN] key followed by [P] key within 3 seconds**
2. Turn Printer ON	**Press [SHIFT DOWN] key followed by [P] key within 3 seconds**
3. Automatic Printer ON	**When main AC power switch turned OFF then ON**

Note: ✍No indicator light to show printer status.

24. Sequence Number Entry

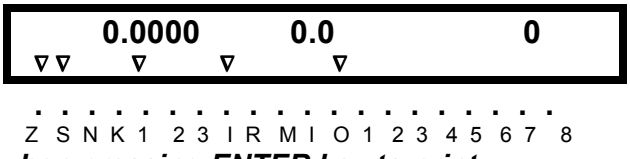
1. *Stand-by Status*



2. Enter Starting Sequence No.
   Ex.) 1200

3. Press **[SHIFT DOWN]** key, then press **[R]** key within 3 seconds.

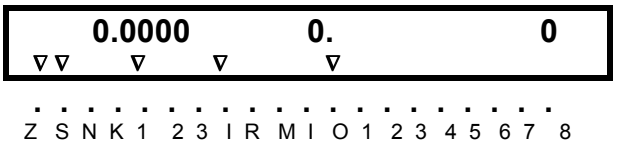
4. Press **[CLEAR]** key to escape.



Note) ✍ Sequence no. increases automatically when pressing ENTER key to print.
Note) ✍ When sequence no. is set to 0, NO Seq. No. will be printer or increased.

25. ID Code Entry

1. *Stand-by Status*



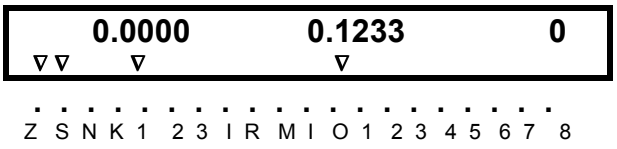
2. Enter ID code.
   Ex) ABC-100#125

3. Press **[CODE RETRY]** key.

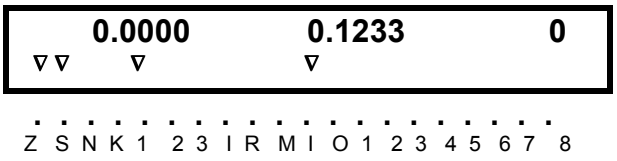
26. Parts Counting Operation

27. Single Transaction

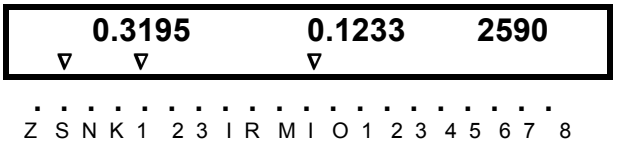
1. *After entering unit weight by any method.*



2. Change task (IN / OUT / NON-ADD) by pressing **[SHIFT DOWN]** then **[•]** key within 3 seconds. *1



3. Place parts on platter.



4. Print label by pressing **[∗ ENTER]** key.

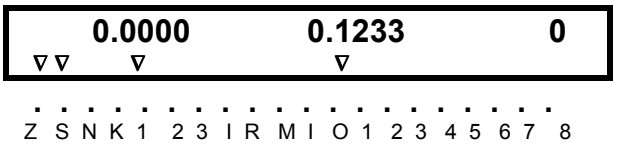
Note 1: ✍ Quantities received IN or shipped OUT of inventory are recorded for each ID code. To count an item in the Inventory file, change the task in step 2.

Note 2: ✍ When both IN and OUT lamps are off, the quantities do not affect Inventory level.

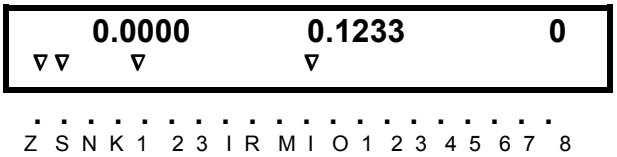
Note 3: ✍ To print a label without counting, enter quantity of parts and press ENTER key.

28. Multiple Transaction (Accumulation)

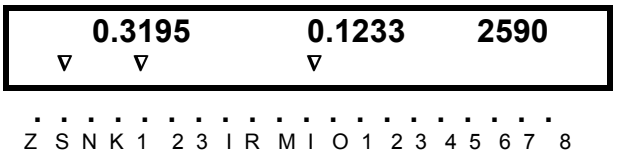
1. *After entering unit weight by any method.*



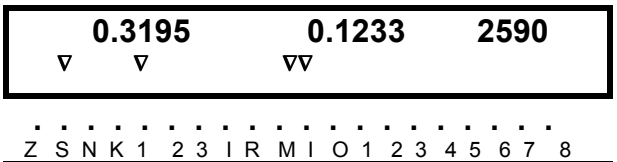
2. Change task (IN / OUT / NON-ADD) by pressing **[SHIFT DOWN]** then **[•]** key within 3 seconds. *1



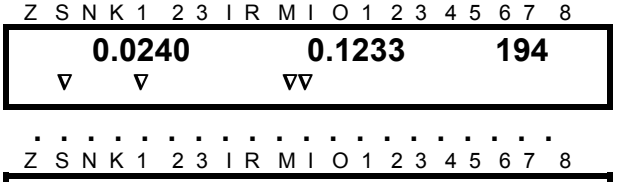
3. 1st placement of parts on platter. (Quantity 1)



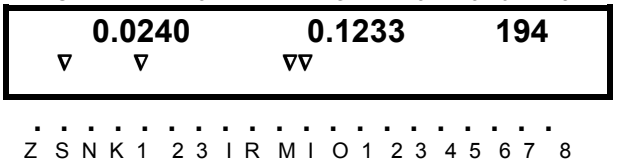
4. Add the quantity to Memory & print by pressing **[+]** key. *2



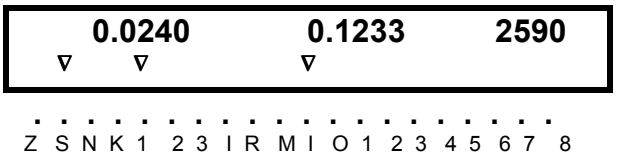
5. 2nd placement of parts on platter. (Quantity 2)



6. Delete the quantity from Memory & print by pressing **[–]** key. *2



7. Print Balance of accumulated parts and clear memory by pressing **[∗].** *3



Note 1: ✍ Quantities received IN or shipped OUT of inventory are recorded for each ID code.
Note 2: ✍ Each transaction label will be printed by pressing [+] and [-] keys.
Note 3: ✍ Grand total label will be printed by pressing [ENTER] key.
Note 4: ✍ When both IN and OUT lamps are off, the quantities do not affect Inventory.
Note 5: ✍ To print label without counting, enter the number of parts and press ENTER

29. Batch Label Print

1. *After entering unit weight by any method.*

2. Enter the number of labels to be printed.
   Ex) 30

3. Press **[SHIFT DOWN]** key then press **[Q]** key within 3 seconds.

4. Press **[CLEAR]** key to escape.

5. Place parts on platter.

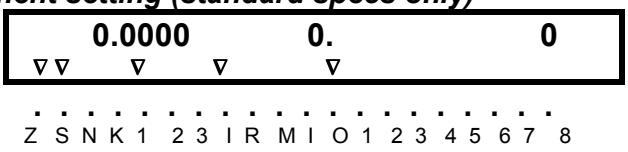
6. Print labels by pressing **[∗ ENTER]** key. *1

Note 1: ✍ The number of labels entered in procedure 2 are printed.
Enter "1" in procedure 2, to return to one label printing.

1.14 Selecting Label Format

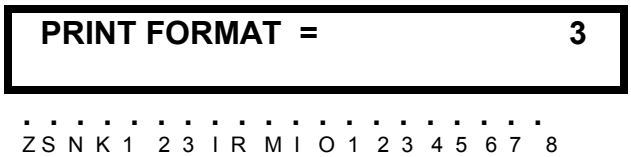
This procedure may be done in operation mode as a temporary change.
Refer to Print Specs no. 33 for permanent setting (standard specs only)

1. *Stand-by Status*

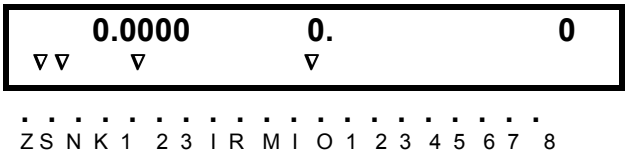


2. Enter Format No. by numeric keys.
   Ex.) **3** [Standard 1-7]

3. Press **[SHIFT DOWN]** key then press the **[O]** key within 3 seconds.

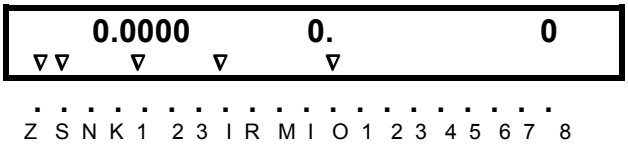


4. Press **[CLEAR]** key to activate format selected



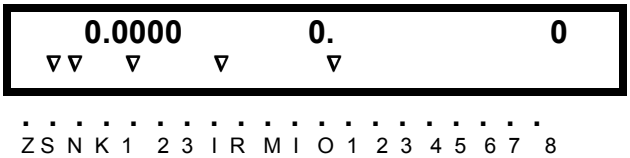
30. .1 Address Data Entry

1. *Stand-by Status*



2. Enter Address No. by numeric keys.
   Ex.) **6**

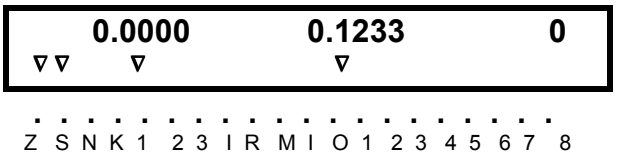
3. Press **[SHIFT DOWN]** key then press the **[N ADDRSS]** key within 3 seconds.



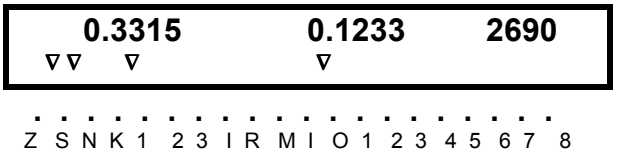
Note 1: ✍ A maximum of 10 files with 5 lines can be stored in Address file. When label format has allocated address print area the selected address would be printed on that label.

31. Gross Weight Display

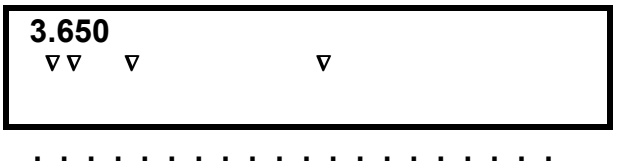
1. *After entering unit weight and tare weight by any method.*



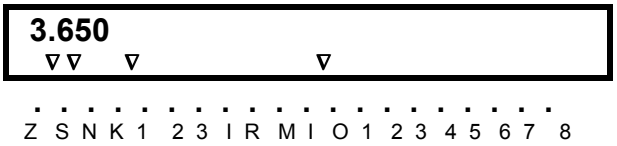
4. Place parts on platter.
   Ex) 0.3315 weight



5. Press **[SHIFT DOWN]** key then press the **[M** NET/GROSS**]** key within 3 seconds to display or print Gross Weight Mode. *1



6. Print labels by pressing **[∗ ENTER]** key. *2



*Note *1) ✍ Display changes to Gross Weight Mode.*

*Note *2) ✍ Gross label will be printed.*

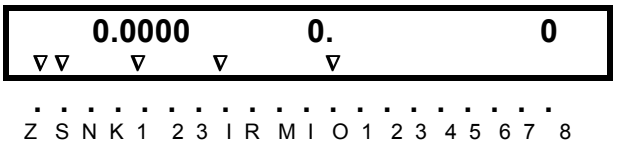
*Note *3) ✍ To return to counting screen, press [SHIFT DOWN] then [M NET/GROSS] key within 3 seconds.*

32. Auto Job Operation Mode

In Auto Job Module, the operator can be GUIDED by a systematic prompting for his work flow pattern that has been selected from the available function list. By pressing only the [ENTER] key the operator will be advanced through the sequence of operations that has been set in the pattern of operation.

Five patterns of Auto Job Operation can be programmed and preserved, then recalled to guide the operator in that established operation procedure. Different patterns can be programmed for shipping, receiving, non-add operations of each ID code. (See Auto Job Programming Section 3.6)

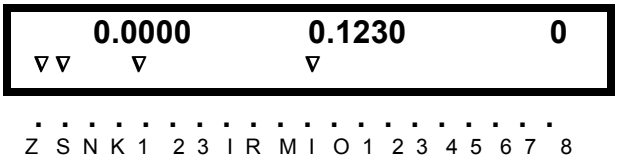
1. *Stand-by Status*



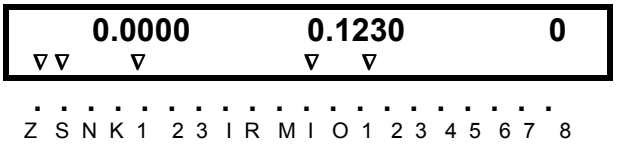
2. Enter ID code.
   Ex.) ABC-100#125

3. Press **[CODE RETRY]** key.

4. Change task (IN / OUT / NON-ADD) by pressing **[SHIFT DOWN]** then [•] key

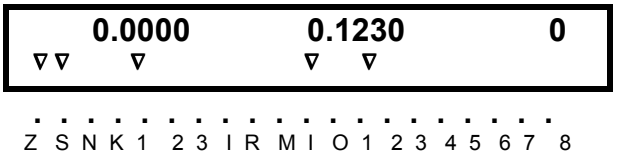


5. Press **[AUTO/ MANUAL]** key. *1



6. Enter Lot No.
   Ex.) CAPACITOR 118E5

7. Press **[∗ ENTER]** key.



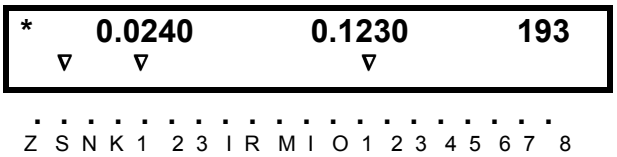
1.16 Auto Job Operation Mode (continued)

8. Place parts on platter.

9. Press **[∗ ENTER]** key.

10. Press **[∗ ENTER]** key to print.

11. Press **[∗ ENTER]** key.



I.e. ✍ The programmed procedure; Lot No. Entry → Counting → Print Label → Operation End.
Alternative Spec setting [MISC SPECS: spec 13 =y; Omit steps 2 & 3, follow scale prompts.

2. PROGRAM MODE

How To Enter The Data Into Memory.

2.1. HOW TO ENTER PROGRAM MODE

2.2. KEY OPERATION IN PROGRAM MODE

2.3. I.D. CODE PROGRAMMING

2.4 DATE & TIME PROGRAMMING

2.5 SET POINT PROGRAM

2.6 FIELD TITLES PROGRAMMING

2.7 PRE-PRINTING PROGRAMMING

2.8 COPY FORMAT PROGRAMMING

2.9 FREE FORMAT PROGRAMMING

2.10 SHELF LOCATION LABEL PROGRAMMING

2.11 SHELF LOCATION RANGE PROGRAMMING

2.12 ADDRESS LABEL PROGRAMMING

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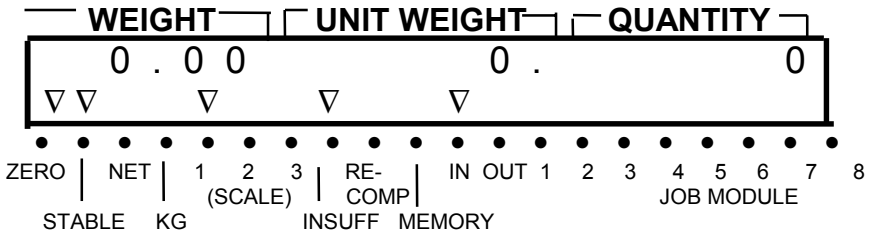
33. 2.1 HOW TO ENTER PROGRAM MODE



1. Change to PRG mode by pressing **[MODE]** key.

PROGRAM MODE

Z S N K 1 2 3 I R M I O 1 2 3 4 5 6 7 8

2. Enter PRG mode by pressing **[∗/ ENTER]** key.

PRG: ID CODE

Z S N K 1 2 3 I R M I O 1 2 3 4 5 6 7 8

3. Select data file in PGM by pressing **[TARE/←]** or **[UNIT WEIGHT/→]** key.

PRG: FREE FORMAT

Z S N K 1 2 3 I R M I O 1 2 3 4 5 6 7 8

4. Enter selected file by pressing **[∗/ ENTER]** key.

F.F= FREE FORMAT 1

Z S N K 1 2 3 I R M I O 1 2 3 4 5 6 7 8

*Note)✍ Change file in loop routine with **[TARE/←]** or **[UNIT WEIGHT/→]** key.*

34. 2.2 KEY FUNCTION IN PROGRAM MODE

[MODE] Key :

To return to the initial screen of each mode without saving programed data.

[AUTO/MANUAL] Key :

To return to the previous screen in programming.

[∗/ENTER] Key :

To enter the next screen in each file.
To enter the programmed data into memory file.

[CLEAR] Key :

To clear mis-set data.
To enter the deletion screen of programmed data.

(LEFT) [TARE/←] and (RIGHT) [UNIT WEIGHT /→] Key :

To select the headings in loop routines.
To move the cursor to left/right when there are plural cursors in a display.

[+] and [–] Key :

To select the data, when cursor of triangle indicator is blinking.

CURSORS

In Programming mode there are two kinds of cursors used:

1.) Lighted cursor ..... The data above lighted cursor should be programmed by the key entry.

2.) Blinking cursor .... The data above blinking cursor should be selected from a list of choices.

The selection is to be made by pressing plus or minus keys.

35. 2.3 ID CODE PROGRAMMING

All the following programmable Data Items are linked to ID CODE.

1. ID CODE --- Max. 16 digit Alpha-Numeric data.

2. UNIT WEIGHT --- Max. 5 digit Numeric data and decimal point.
Unit weight can be entered by using sample counting or direct key entry when unit weight is known. **PRESS [UNIT WEIGHT/→]** key**.**

3. TARE WEIGHT --- Max. 5 digit Numeric data and decimal point. Tare weight can entered by one touch tare entry or direct key entry when tare weight is known. **PRESS [TARE/←]** key.

4. PART NO. --- Max. 32 digit Alpha-Numeric data. Enter Part number
PRESS [SHIFT ↓] key**,** then **[A/ PART NO.]** key.

5. PART NAME --- Max. 32 digit Alpha-Numeric data. Part name can be changed in operation mode temporarily, then printed in OPN Mode without changing memory file.
PRESS [SHIFT ↓] key, then **[B /PART NAME]** key.

6. LOCATION --- Max. 8 digit Alpha-Numeric data defined by limits.
PRESS [SHIFT ↓] key, then **[C /LOCATION]** key.

7. INVENTORY --- Max. 8 digit Numeric data and minus. After you enter the initial quantity of stock, it is adjusted with receiving IN or shipping OUT transactions.
PRESS [SHIFT ↓] key, then **[D/INVENTORY]** key.

8 THRESHOLD --- Max. 8 digit Numeric data. Threshold is minimum quantity maintained and point when reordered for stock.
PRESS [SHIFT ↓] key, then **[E /THRESHOLD]**key.

9. SET POINT --- According to SPEC setting in maintenance mode.
(Quantity = 7 digit, percentage = 2 digit + decimal)

10. SCALE --- 1 digit 1~3. Select the scale platform that can accommodate the parts to be counted, 1 - 2 - 3.
PRESS [SHIFT ↓] key, then **[G /SCALE]**key.

11. In /Out / Non-add ---1 digit 1~5. Auto Job Pattern number can be selected for receiving/shipping/ checking operation for each ID CODE independently.

36. *2.3.1 ID CODE - DATA STORAGE IN MEMORY*

ID Code allows you to store information in memory through program mode. The following information may be programmed in each ID Code data storage address. The field length will vary with each line of data from one digit to 32 digits.

Inventory Data Storage Fields

Field Length	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**32**
1. ID Code																	
2. Part Number																	
3. Part Name																	
4. Unit Weight																	
5. Stock Location	0	1					Z	Z									
6 Inventory Balance																	
7. Threshold Reorder Point																	
8. Tare Weight																	
9. Set Point Quantity/Wgt .																	
10. Scale to Use.																	

NOTE: Fill in blank spaces with data. From 1 to 32 digits. When entering multiple data items, use IBM AT keyboard, or duplicate this chart before manually entering data into memory for each Code Number.

TASK	**PROCEDURE**
Program Item Data	Press Mode Key to Program, Press ENTER key
PRG: ID CODE	Press ENTER ID = Enter ID Code
1. Enter A/N ID Code	Press A/N Keys to enter the specific ID Code, Press CODE Key *✍1 All other lines of data can be entered at random, To Exit, Press ENTER Key
2. Enter Part Number	A/N Keys, SHIFT DN, then PART NO. (A) key *✍2
3 Enter Part Name	A/N Keys, SHIFT DN, then PART NAME (B) key *✍2
4. Enter Unit Weight	Sample New UW or Keyboard enter known UW, Press U/ W key
5. Enter Location	Enter all eight digits, Press SHIFT DN then LOCATION (C) key *✍2
6. Enter Inventory Balance	Enter Starting Quantity, Press SHIFT DN then INVENT (D) key
7. Enter Threshold	Enter Re-Order point Quantity, Press SHIFT DN then Th'Hold (E) key *✍2
8. Enter Tare Weight	Enter known tare weight from keyboard, Press TARE key or Place tare weight on scale, then Press TARE key. Tare weight must be less than scale capacity.
9. Enter Set Point	Press SHIFT DN, SETPOINT (F) key, then Enter Quantity, Press SETPOINT (F) key, Press RIGHT-> key, then Enter %, Press SETPOINT (F) key twice. To view data Press SHIFT DN, SETPOINT (F) again.
10.Select Scale	Enter Scale Number 1,2, or 3 , then Press SHIFT DN SCALE (G) key,

*NOTE *✍1) Always enter ID Code FIRST: i.e. Enter "ABC-123" Up to 16 A/N characters in Length.*

**✍2) Recall entry, Press SHIFT DN then item data key,*
Press CLEAR to Delete, respond with (Y = Yes or N = No)

**✍3) AUTO/Manual Key Undo last action.*

2.3.2 PROGRAMMING ID CODE ITEM DATA

Select Program Mode then enter the following sample data for practice operation.

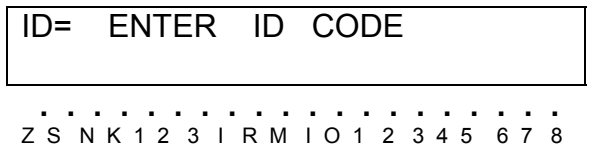
Ie:	ID CODE	= ABC-100 125
	PARTS NUMBER	= H1-1357E-01
	PARTS NAME	= ELECTROLYTIC CAPACITOR
	UNIT WEIGHT	= 1.5 lbs
	LOCATION	= 01-15-07-1-E
	INVENTORY	= 5,000 PCS
	THRESHOLD	= 3,000 PCS
	SET POINT	= 300PCS / 80.0%
	SCALE NO.	= 1
	AUTO JOB #	= 1 for RECEIVING/ 2 for SHIPPING/ 3 for CYCLE COUNTING

Note: ✍ *You must first enter ID CODE to establish a NEW item data location, then enter fields of data, press [ENTER] key as last step of ID CODE programming to save item data into memory file. 385 standard ID CODE locations are available with expansion to 3080 locations.*

Note: ✍ *All other fields can be entered at random or omit any of these data items, if they are not necessary.*

Ie: PRACTICE ENTERING ID CODE ITEM DATA IN PROGRAM MODE.

1. Select ID CODE file and press **[∗/ ENTER]** key.



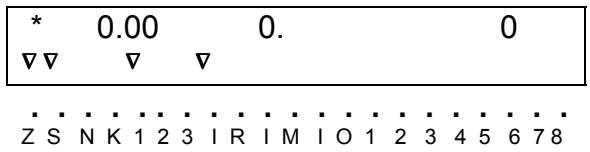
2. Enter ID CODE.
i.e.) ABC-100125

3. Press **[CODE]** key to enter the screen to set the data for ID code.
(Ready for setting data)

PART NUMBER ENTRY TO ID CODE

4. Enter **parts number** with key entry.
i.e.) H1-1357E-01

5. Press **[SHIFT ↓]** key then **[A / PART NO.]** key within 3 seconds.
(Ready for setting the other item data)



PART NAME ENTRY TO ID CODE

6. Enter **parts name** with key entry.
i.e.) Electrolytic capacitor

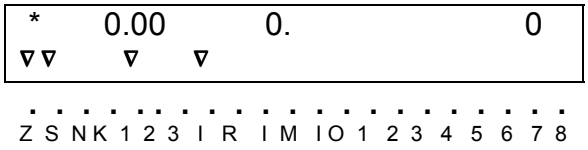
7. Press **[SHIFT ↓]** key then **[B /PART NAME]** key within 3 seconds.
(Ready for setting the other item data)

LOCATION NUMBER ENTRY FOR ID CODE

8. Enter **location number** with key entry.
i.e.) 01-15-07-1-E

NO DASHES - AUTOMATICALLY INSERTED

9. Press **[SHIFT ↓]** key then **[C /LOCATION]** key within 3 seconds.
(Ready for setting the other item data)

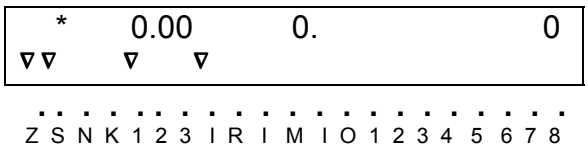


*NOTE) *✍ If you cannot assign a location number, the entry may be out of the range of shelf limits . Refer to "program the limit of shelf location number."*

INVENTORY ENTRY FOR ID CODE

10. Enter **inventory quantity** with key entry.
i.e.) 5000 PCS.

11. Press **[SHIFT↓]** key then **[D /INVENTORY]** key within 3 seconds.
(Ready for setting the other item data)



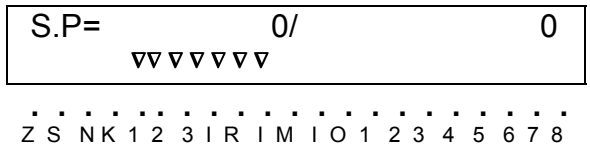
THRESHOLD ENTRY FOR ID CODE

12. Enter **threshold quantity** with key entry.
i.e.) 3000 PCS.

13. Press **[SHIFT↓]** key then **[E/ THRESHOLD]** key within 3 seconds.
(Ready for setting the other item data)

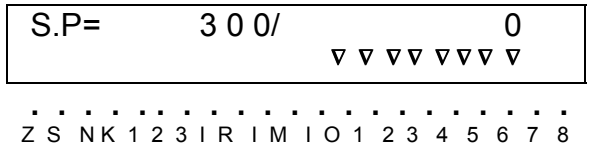
SET POINTS ENTRY FOR ID CODE

14. Press **[SHIFT ↓]** key then **[F/SET POINT]** key within 3 seconds.
i.e.) 300PCS (Value *1)/ 80% (Value *2)



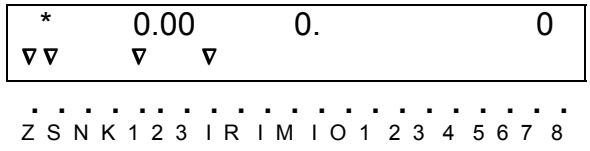
15. Enter Set point value (*1) and press [F/set point] key.

16. Move the cursor to right by pressing **[UNIT WEIGHT/ →]** key.



17. Enter Set point value (*2) and press **[F/SET POINT]** key

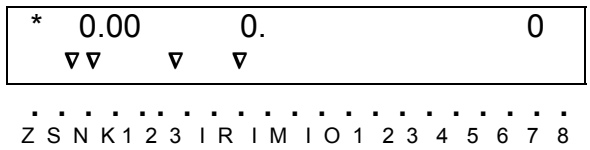
18. Press **[F/SET POINT]** key. To lock-in Set Points for ID CODE



SCALE PLATFORM NO. ASSIGNED TO ID CODE

19. Enter scale number with key entry.
i.e.) Scale no. = 1

20. Press **[SHIFT↓]** key then **[G/SCALE]** key within 3 seconds.



IN / OUT / NON-ADD ENTRY TO ID CODE

21. Enter Auto job pattern number.
i.e.) Auto job number in. (1)
receiving operation

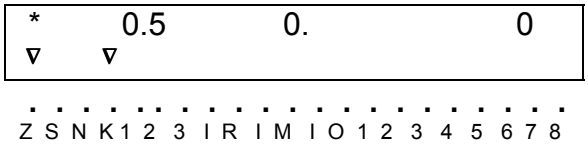
22. Press **[SHIFT ↓]** key then **[H / IN]** key within 3 seconds.
(Ready for setting the other item data)

*NOTE) * ✍ Auto job no. can be selected from 5 patterns which are programmed in Maintenance mode.*
** ✍ You can select Auto Job no. for shipping to check operations with the same pattern as the above except using [I/ OUT] or [J /NON-ADD] key instead of [H/IN] key.*
** ✍ If auto job number is not assigned for ID code, auto jobs are according to address 4,5,6 of "MISC SPEC."*

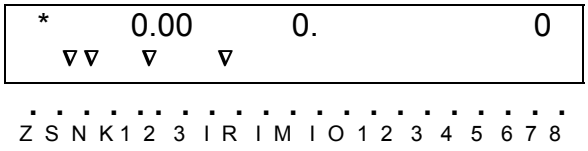
TO ENTER TARE VALUE TO ID CODE TWO WAYS

Un-known tare weight

23. Place tare weight on the platter
(i.e. 0.500)



24. Press **[TARE/←]** key.



OR

Known tare weight

(23) Enter tare weight value with numeric key.
(i.e. 0.50)

(24) Press **[TARE /←]** key.

.

*Note) ✍ To clear tare weight, press **[0]** and **[TARE]** key.*

TO ENTER UNIT WEIGHT FOR ID CODE

Known unit weight

25. Enter unit weight value with numeric key.
I.e.) 1.5

26. Press **[UNIT WEIGHT→]** key.

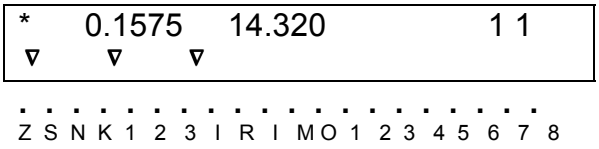
Note) ✍ Unit weight entry is always weight per 1,000 pcs.
(Unit weight 1.5 lbs = 1.5 lbs per 1000pcs or 0.0015 lbs per piece.)

Un-known unit weight

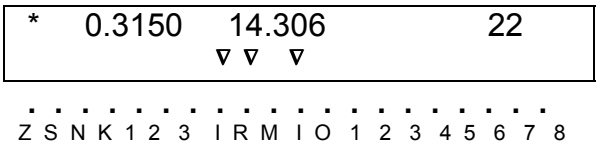
(25) Place 11 pieces of sample on scale.
i.e.) Weight 0. 1575

(26) Enter the number of sample pieces.
i.e.) Sample =11

(27) Press **[PIECES]** key to compute unit weight.



(28) Add more weight, about twice a much as the first sample to compute a new UW , press **[PIECES]** key.
Additional sample = 11 pcs



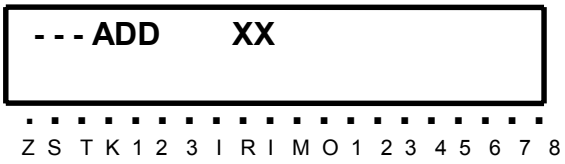
NOTE) ✍ When the unit weight is developed thorough sampling, the accuracy of that Computation can be improved by increasing the sample size and using the recomputing feature. This function works only when the "RECOMP" light is on

NOTE 1) ✍ *If the sample quantity is 10 pcs for computing unit weight, press the **[PIECES]** key without the necessity of entering the digits "1 & 0" characters as in the first sample.*

NOTE 2) ✍ *To clear unit weight value, enter **[0]** and press **[UNIT WEIGHHT**] key.*

NOTE 3) ✍ *To have accurate unit weight calculation, the sample weight must be more than the insufficient range of the scale. (Insufficient range is 0.0% ~ 0.7 % of scale capacity) The factory default is set at 0.1%*

NOTE 4) ✍ *If sample weight is less than 0.1%, the display shows the following massage. In this example case, the sample weight is insufficient to calculate a reliable unit weight. Place the additional sample pieces on the scale, for accurate sample and press **[PIECES]** key again.*



After you set all the item data in ID code file, press [ENTER] key to save the data into MEMORY FILE.

The display goes back to the initial screen of "ID=ENTER ID CODE".

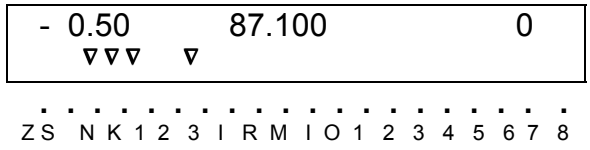
37. 2.3.3 DELETION OF PROGRAMMED ID CODE and ITEM DATA

1. Select ID code and press **[∗ ENTER]** key.

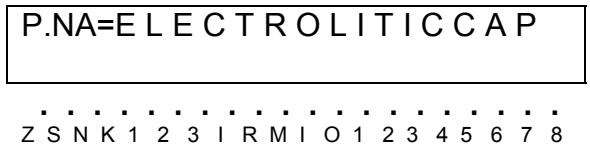
2. Enter ID code which is in memory file and press **[CODE]** key**.** i.e.) ABC-100125

NOTE) ✍ If the entered ID code exists in memory files, the choice to delete all data or not must be made by pressing [Y] key to delete entire file or [N] key to advance.

3. Press **[N]** key to enter ID CODE fields.

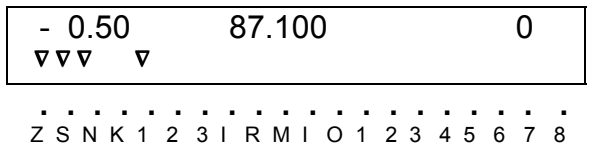


4. Press **[SHIFT↓]** key, then **[B/PART NAME]** key to recall programmed data of parts name.



5. Press **[CLEAR]** key to enter the deletion screen.

6. To delete programmed data, press **[Y]** key, or **[N]** to keep data.



7. Press **[∗ ENTER]** key to select ID CODE, then revise data in memory file.

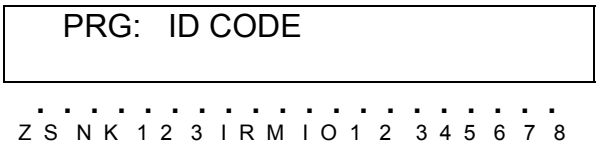
*Note 1) ✍ **[TARE←]** key is used for scrolling UP the display of the programmed data to the left edge **[UNIT WEIGHT→]** key is used for scrolling DOWN the display of the programmed data to the right edge.*

Note 2) ✍ You can delete any of the following item data with the same operation as the above (Part no. , Part name , Shelf location number , Inventory , Set point , Threshold , Scale no., and Auto job no.)

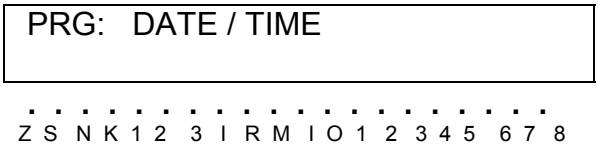
38. 2.4 DATE AND TIME PROGRAMMING

The current date and time are printed on labels and reports when selected.
After setting the current time, a built-in quartz clock renews the times automatically.

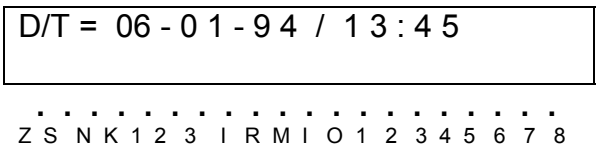
1. Enter PRG mode.



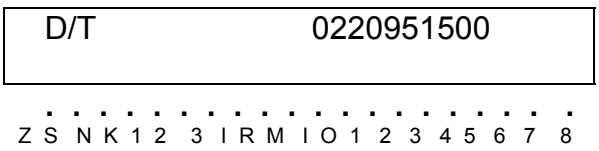
2. Select Date and Time with **[UNIT WEIGHT →]** key.



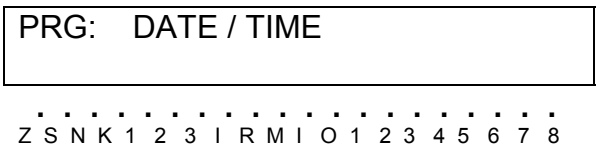
3. Press **[∗ ENTER]** key.
Previous D & T



4. Enter date and time continually with numeric key.
i.e.) February 20, 1995 PM 3:00



5. Press **[∗ ENTER]** key.



Note 1) ✍ The data entry for date and time are made with 10 continuous digits of numeric entry.

Note 2) ✍ The data format can be chosen by 3 patterns in Misc Spec 12 in maintenance mode.

Day (2) / Month(2) / Year (2) and Hour (2) / Time (2)

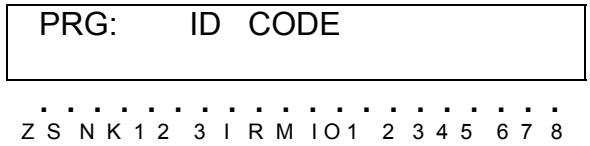
Month (2) / Day (2) / Year (2) and Hour (2) / Time (2)

Year (2) / Month (2) / Day (2) and Hour (2) / Time (2)

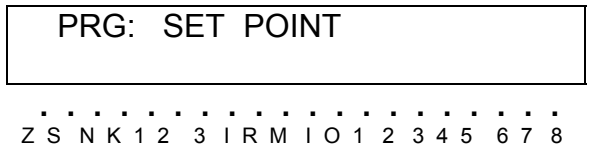
39. 2.5 SET POINT OUTPUT PROGRAMMING

You can program an INDIVIDUAL set point for each ID Code being weighed and counted or set the GENERAL set point value for all items.

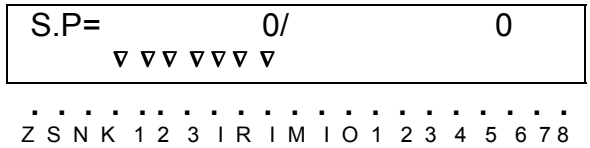
1. Enter PRG mode



2. Select Set Point value with **[UNIT WEIGHT →]** key.

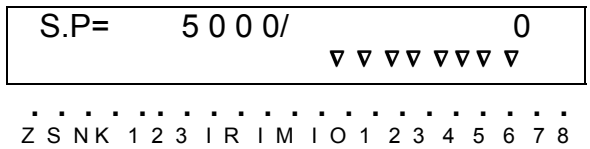


3. Press **[∗ ENTER]** key.

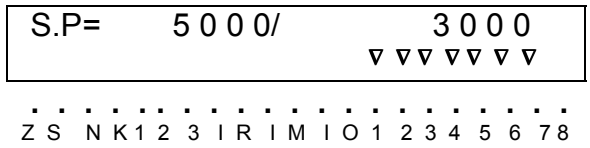


4. Enter Set point value 1 and press [F] key.
I.e.) Set point 1 = 5,000 Set point 2=3,000

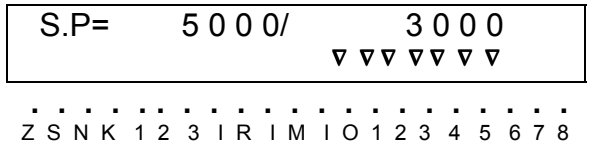
5. Move the cursor to right by pressing **[UNIT WEIGHT→]** key.



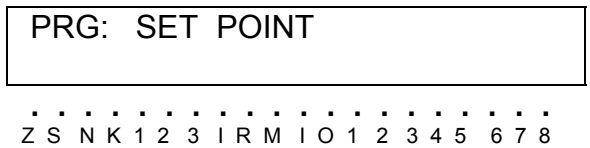
6. Enter Set point value 2.



7. Press **[F]** key.



8. Press **[∗ ENTER]** key.



Note) ✍ You can change the combination of set points functions in Misc Spec 00-01 in Maintenance mode.

40. 2.6 FIELD TITLES PROGRAMMING

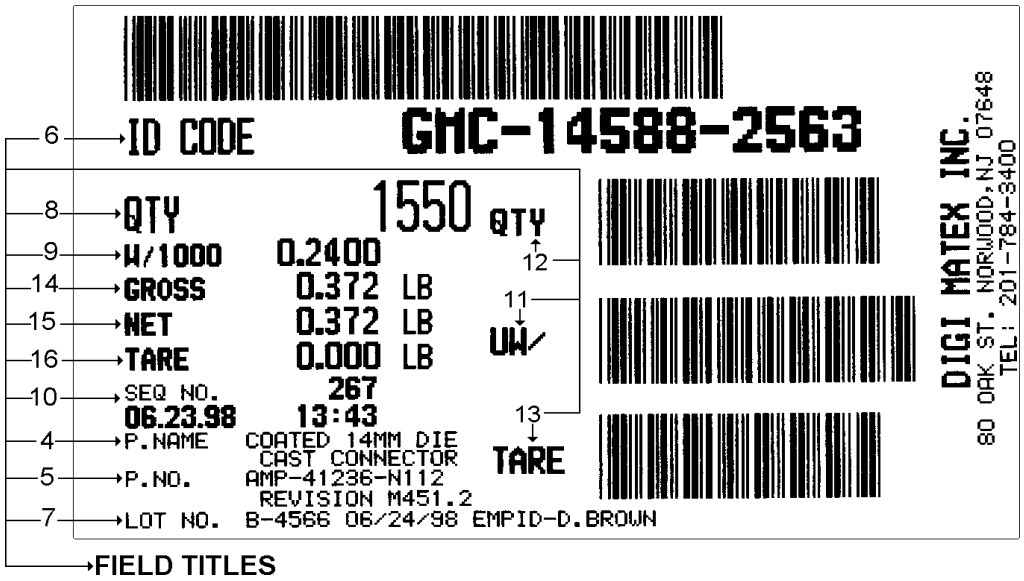
The Field Title is the name of field in label format, such as “TARE”, “QTY”. You can program 16 Field Titles in label format. Printing position and character size of each Field Title in format is programmed in FREE FORMAT PROGRAM.

Because the Field Titles are linked with standard label format as well as free format, if you change the Field Title from the following table, the Field Title in standard format are also changed. When you change the default Field Title, refer to the standard format list in APPENDEX I.

The default titles are:

FIELD TITLES NO.	DEFAULT CONTENTS	FIELD TITLES NO.	DEFAULT CONTENTS
T 1	GROSS	T 9	W/1000
T 2	NET	T 10	SEQ NO.
T 3	TARE	T 11	UW/
T 4	P.NAME	T 12	QTY
T 5	P.NO.	T 13	TARE
T 6	ID CODE	T 14	GROSS
T 7	LOT NO.	T 15	NET
T 8	QTY	T 16	TARE

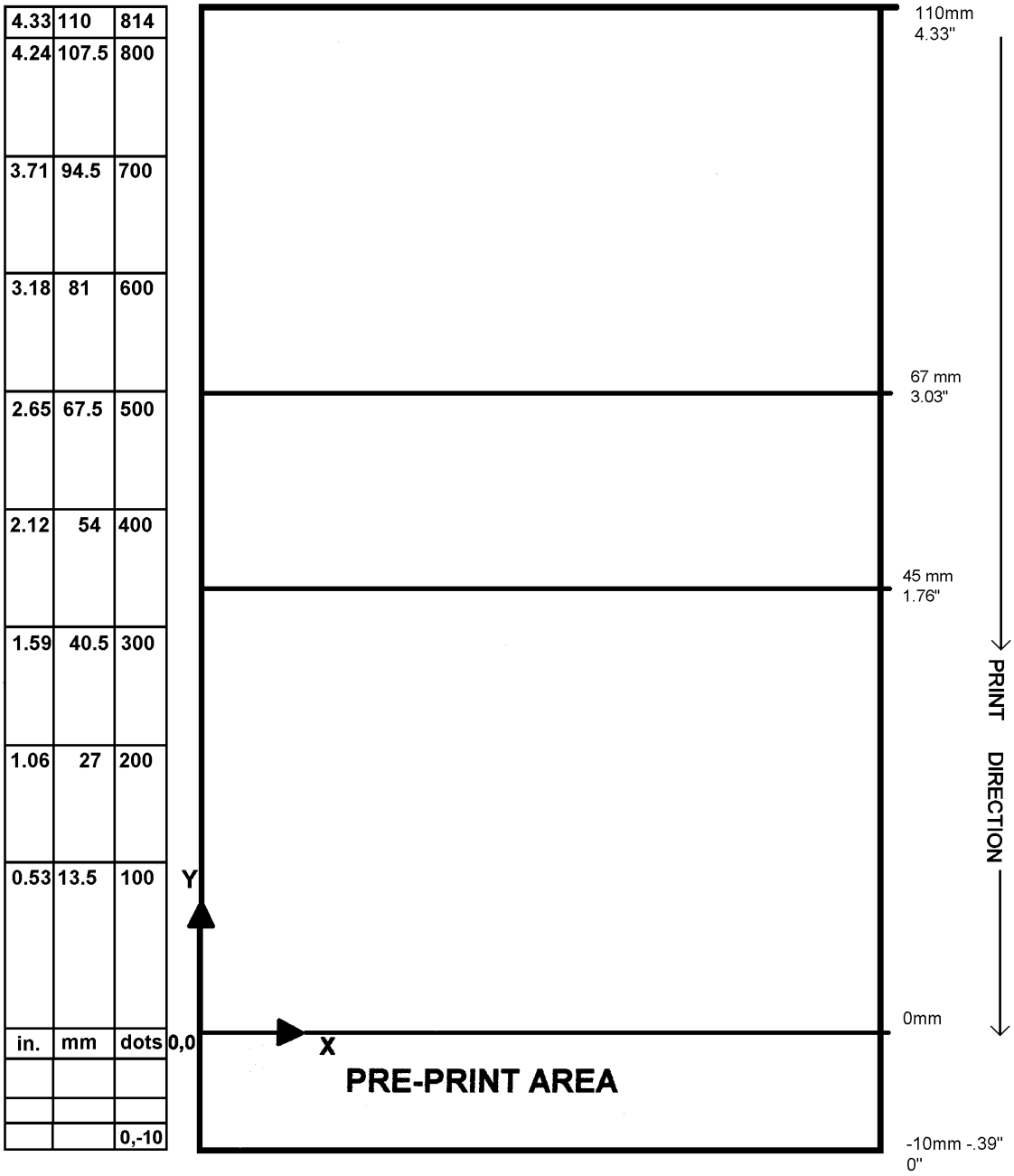
Contexts are for gross label.



Opn2150b.Doc 8/1/96

DC-150 Label Grid

STANDARD



dots	100	200	300	400	474
mm	13.5	27	40.5	54	64
in.	0.53	1.06	1.59	2.12	2.496

1 dot = 0.135mm

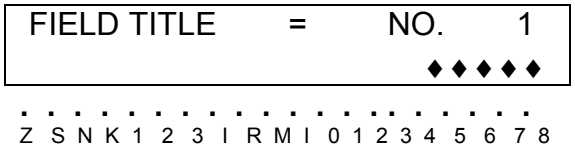
2.6.1.

41. 2.6.2. *PROGRAMMING FIELD TITLE NAMES*

1. Enter PRG mode.

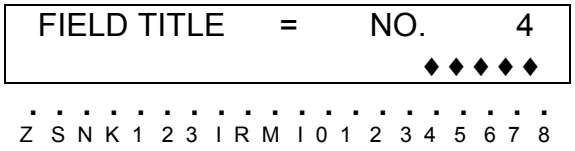
2. Select FIELD TITLE with **[TARE←]** or **[UNIT WEIGHT→]** key.

3. Press **[∗/ENTER]** key.

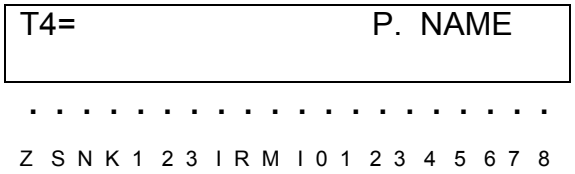


♦ = Blinking cursor

4. Select FIELD TITLE no. by pressing **[+]**and **[–]** key (Title Loop 1 → 16 choices)

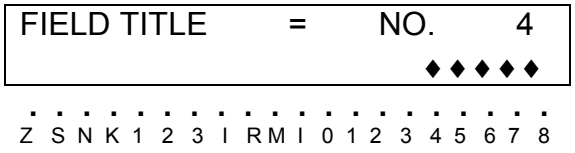


5. Press **[∗/ENTER]** key.



6. Enter data by key entry.
I.E.) ITEM NAME

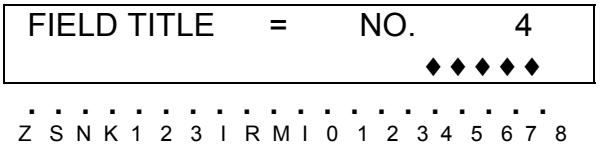
7. Press **[∗/ENTER]** key to enter the data into the memory file.



42.

43. 2.6.3. DELETION OF PROGRAMMED FIELD NAMES

1. Select FIELD TITLE no. by pressing **[+]** and **[–]** key



2. Press **[∗/ENTER]** key.

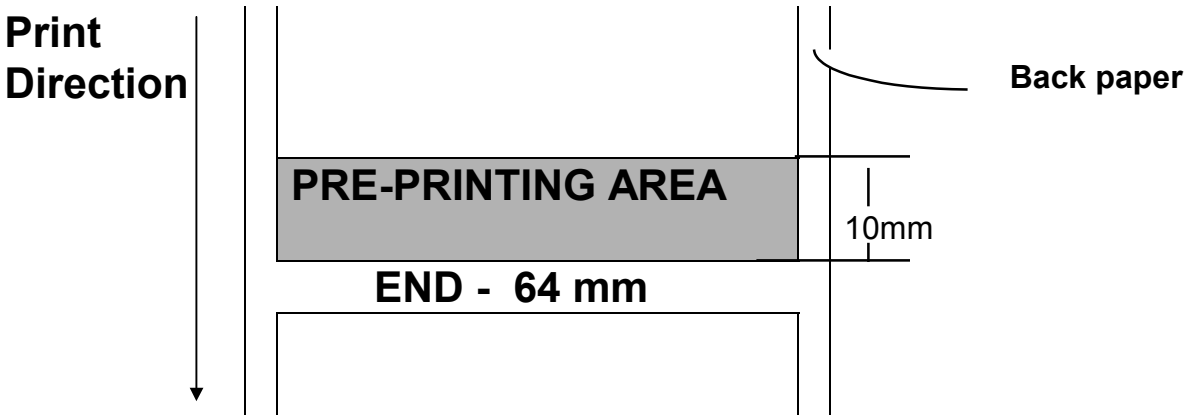
3. Press **[CLEAR]** key to enter the deletion screen.

3. Press **[Y]** key to execute the deletion. "MEMORY DELETED"

NOTE) ✍ To escape from the deletion screen, press [N] key. The display returns to the previous screen.

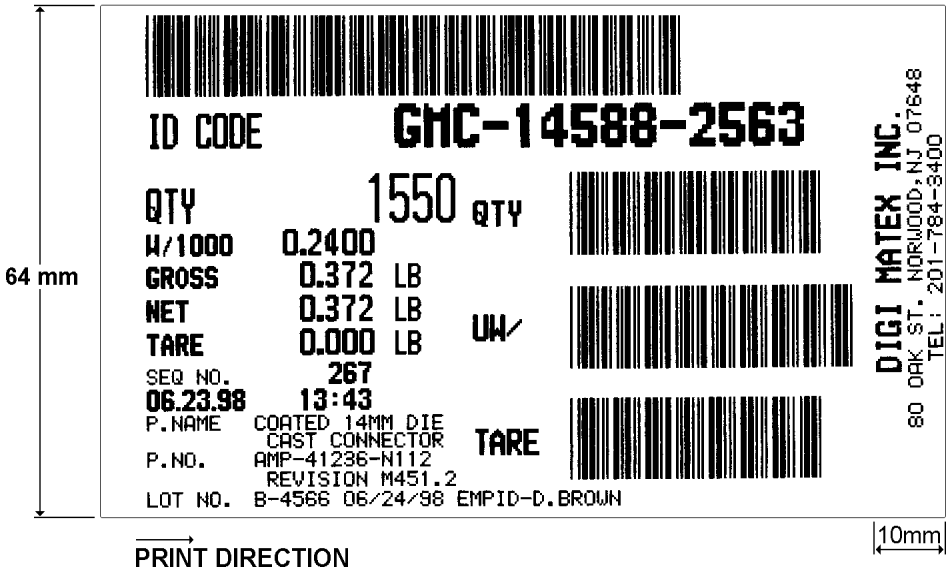
44. 2.7 PRE-PRINT PROGRAMMING OF VENDOR NAME

The LABEL end is reserved [10mm area] for fixed (pre-printing) data, such as vendor name, plant location, or company motto, can be printed. To print data the contents, print position and character size must be programmed. Up to 3 lines can be printed in this area. One line can be programmed 32 digits at maximum.



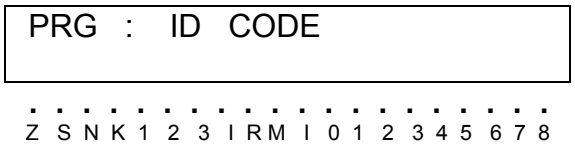
45. 2.7.1. PRE-PRINTED PROGRAM FIELDS

THERMAL
PRINT
HEAD



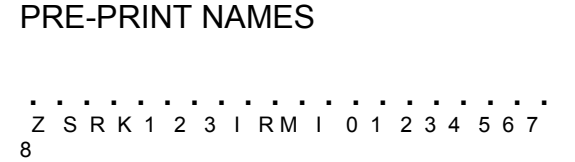
46. 2.7.2. PROGRAMMING FOR PRE-PRINT NAMES

1. Enter PRG mode.

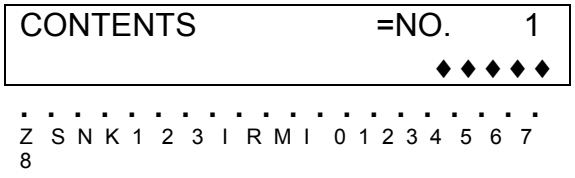


2. Select pre-print name with **[TARE←]** or **[UNIT WEIGHT→]** keys.

3. Press **[∗/ENTER]** key.

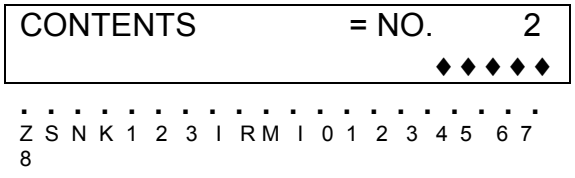


4. Press **[∗/ENTER]** key.

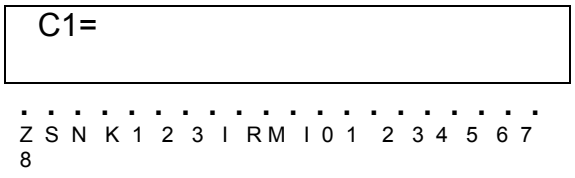


♦ = Blinking cursor

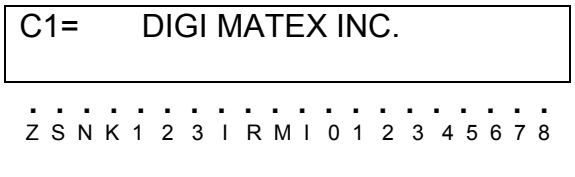
5. Select line no. by pressing **[+]**and **[–]** key 1/2/3



6. Press **[∗/ENTER]** key.



7. Enter A/N data by key entry.
ie. DIGI MATEX INC.



8. Press **[∗/ENTER]** key to enter the data into memory. Press A/M key to return to previous screen

9. Select next Contents no. With **[+]** or **[–]** key. Enter data for next line, Repeat for last line
ie. 80 Oak St. Norwood, NJ

10. Select Contents no. with **[TARE←]** or **[UNIT WEIGHT→]** keys to enter data to other lines, if need.

ie. Tel 201-784-3400

11. Press **[∗/ENTER]** key to save in Memory, then **[AUTO/MANUAL]** key to return to previous screen.

*NOTE: ✍ To return to previous diaplay press **[AUTO/MANUAL]** key. Enter entire line of data before pressing **[∗/ENTER].***

47. 2.7.3. DELETION OF PROGRAMMED PRE-PRINT CONTENTS

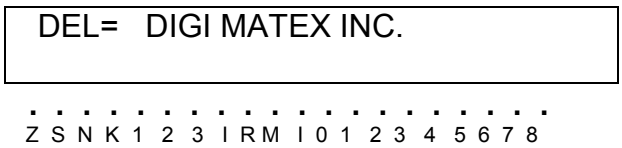
STEPS 1 Through 4 are the same as 2.7.2

(5) Select Pre-Print Names by pressing **[+]** and **[–]** key

(6) Press **[∗/ENTER]** key.

(7) Press **[CLEAR]** key to clear the screen.

Press ***[Y/N]*** TO DELETE DATA



(8) Press **[Y]** key to delete the programmed data.

NOTE) ✍ To escape from the deletion screen, press [N] key.
The display will go back to the previous screen.

NOTE) ✍ C = Contents

48. 2.7.4. PRINT POSITION AND CHARACTER SIZE OF PRE-PRINT NAME.

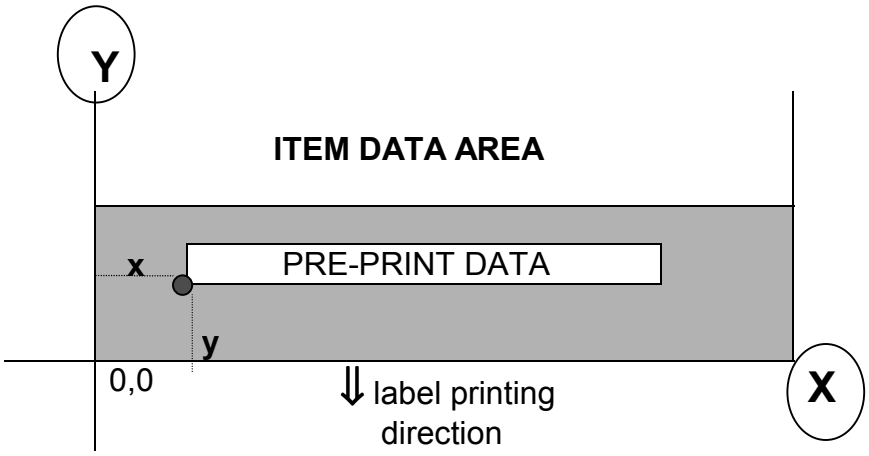
2.7.4.1 PRINT POSITION

Printing position of pre-printing name is decided with X and Y value.

The X and Y value is the interval from the start point where X=0, Y=0.

The both values are graduated by "DOT" size. (one dot is X=0.135mm, Y=0.135mm)

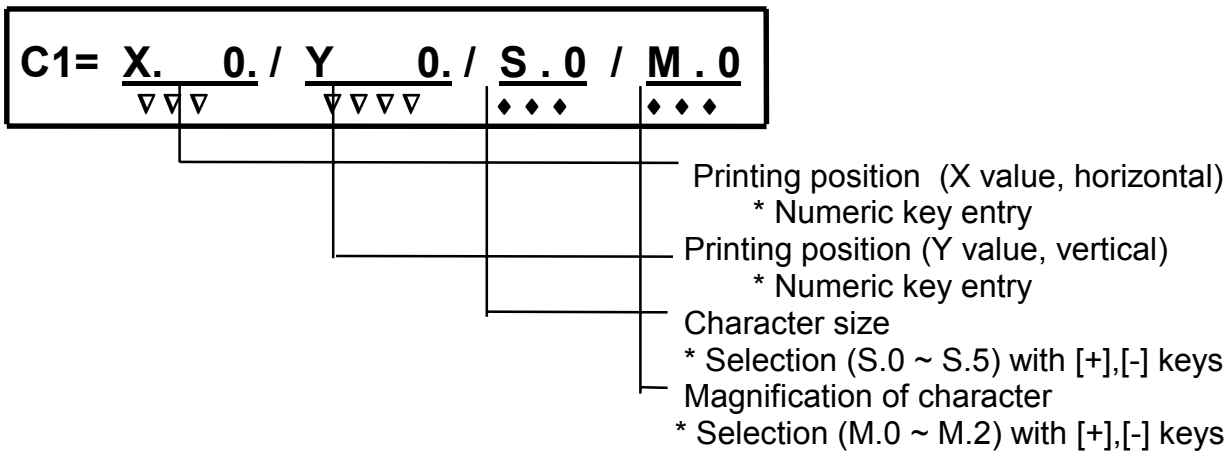
Note: ✍ PRINT SPECS No. 24 must be set to "Y" to print vendor name.



2.7.4.2. CHARACTER SIZE and MAGNIFICATIONS OF CHARACTER SIZE

Please refer to size of character and the magnification on APPENDIX II & III to select the appropriate combination for your preprinting data.

2.7.4.3. DISPLAY OF PROGRAMMING SCREEN SAMPLE


C1= X. 0. / Y 0. / S . 0 / M . 0
Printing position (X value, horizontal)
* Numeric key entry
Printing position (Y value, vertical)
* Numeric key entry
Character size
* Selection (S.0 ~ S.5) with [+],[-] keys
Magnification of character
* Selection (M.0 ~ M.2) with [+],[-] keys

*Note) Disable printing of data, set the printing position with " **0** " value for X and Y.*

2.7.4.4. PROGRAMMING PRE-PRINTED COORDINATES

1. Enter PRG mode and select pre-print name. Press **[TARE←]** or **[UNIT WEIGHT→]** key

PRG : PRE-PRINTED NAME

. . . . . .
Z S N K 1 2 3 I R M I 0 1 2 3 4 5 6 7 8

2. Press **[∗/ENTER]** key.

PRE-PRINT NAMES

. . . . . .
Z S N K 1 2 3 I R M I 0 1 2 3 4 5 6 7 8

3. Press **[TARE←]** or **[UNIT WEIGHT→]** key to enter "PRINT COORDINATE" screen.

PRE-PRINT COORDINATE

. . . . . .
Z S N K 1 2 3 I R M I 0 1 2 3 4 5 6 7 8

4. Press **[∗/ENTER]** key.

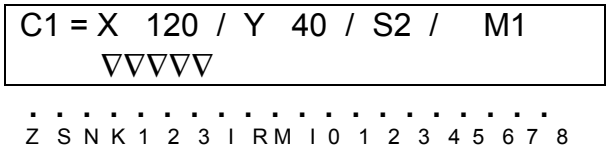
(NOTE: LOOP THRU 1-2-3 LINES)
with + / - key

COORDINATE = NO. 1
♦ ♦ ♦ ♦ ♦

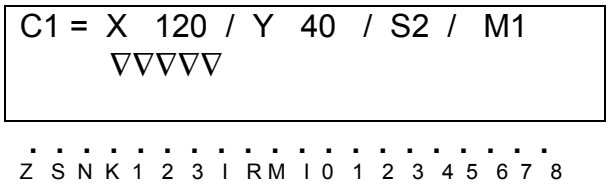
. . . . . .
Z S N K 1 2 3 I R M I 0 1 2 3 4 5 6 7 8

♦ = Blinking cursor

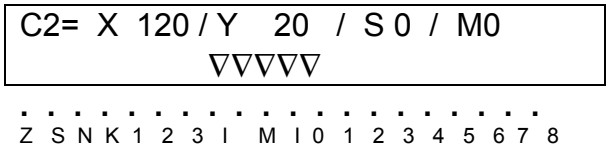
5. Press **[∗/ENTER]** to view coordinates



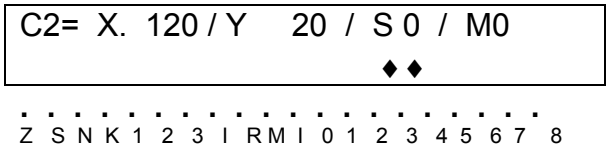
6. Select field coordinates X/Y/S/M by pressing **[UNIT WEIGHT→]** key to move cursor right under field - reverse direction with **[TARE←]**



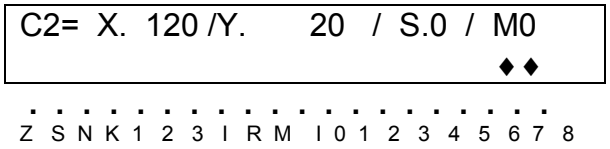
7. Enter X value & press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) X value =120



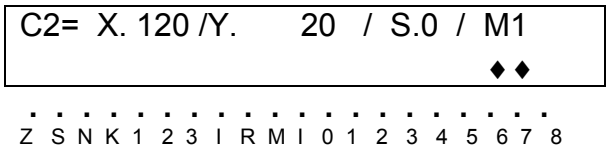
8. Enter Y value & press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) Y value = 20



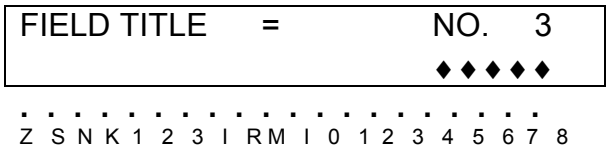
9. Select character size by pressing **[+]** or **[–]** key & press **[UNIT WEIGHT→]** key to move cursor.
i.e.) Character size = S0



10. Select magnification by pressing **[+]** or **[–]** key.
i.e.) Character size = M1



11. Press **[∗/ENTER]** key to enter the data into the memory file.
i.e.) SAMPLE 10mm Area



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Tel: 201-784-3400

- C1 = X 120 / Y 40 / S.2 / M1
- C2 = X 80 / Y 20 / S.0 / M1
- C3 = X 130 / Y 1 / S.0 / M1

VENDOR NAME WITHIN COORDINATES

49.2.8. COPY OF STANDARD FORMAT(FORMAT-COPY)

If the label format you need to design is similar to a standard format, you can make a new format easily by copying the standard format then re-arranging the print position and character size of the data in a NEW FREE format design.

When you select the standard format to copy to, refer to the list of standard format in APPENDIX I.

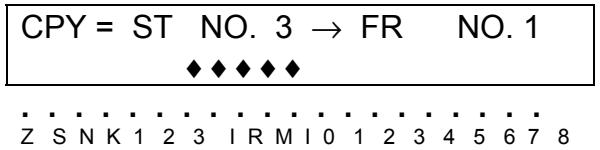
1. Enter PRG mode and select a format to copy

(ST = STD.) (FR = FREE FORMAT)

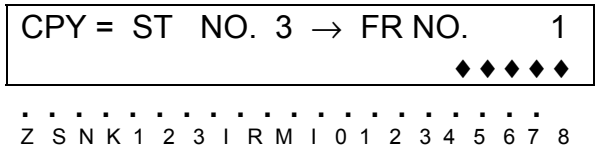
2. Press **[∗/ENTER]** key.

◊= Blinking cursor

3. Select standard format no. to copy with **[+]** or **[–]** key. i.e.) standard no. 3

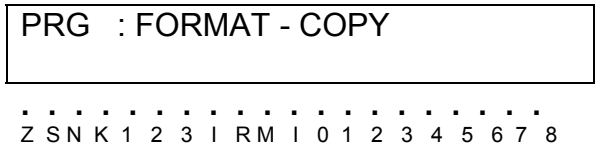


4. Move the cursor by pressing **[UNIT WEIGHT→]** key.



5. Select free format no. to copy with **[+]** or **[–]** key. i.e.) free format no.2

6. Press **[∗/ENTER]** key to enter the data into the memory file.



50. 2.9. FREE FORMAT PROGRAMMING

DC-150 has 7 types of standard formats, so that you can select the label format suited to your needs. However, in the case that none of the standard formats is suited to the user's needs, you can make a new label format. Two free formats are possible.

According to the usage of the machine, DC-150 can print 3 types of labels: ITEM LABEL, TOTAL LABEL AND GROSS LABEL. The data base of one label format has all 3 types of labels. When you make a new label format, the format data for Item, Total and Gross labels are saved as one data base. To make a new label format: label size, print angle, print position, character size must be programmed.

51. 2.9.1. TYPE OF LABELS

In operation mode, the DC-150 can print all 3 standard types of labels.

1. ITEM LABEL ... Issued in SINGLE OPERATION
2. TOTAL LABEL ... Issued in MULTIPLE TRANSACTION with **+** and **-** keys in
3. GROSS LABEL ... Issued in GROSS WEIGHT OPERATION

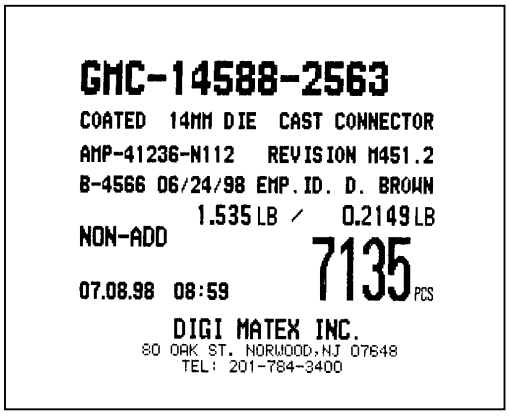
52. 2.9.2. LABEL SIZES

You can select a label size from 11 sizes listed in Print Spec 34.

The standard frequently used label width is 64mm.

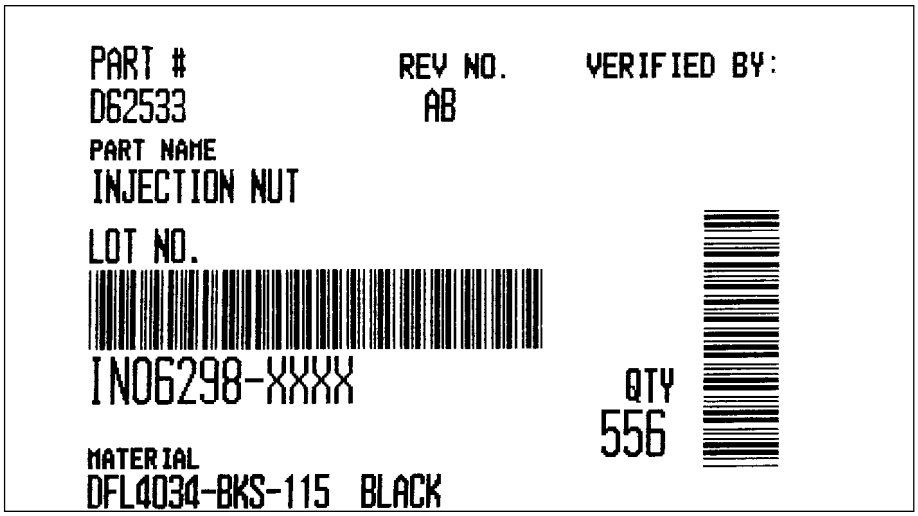
P/N	mm	Inches
L-52	**64 x 55**	**(2-1/2" x 2-1/4")**
L-53	**64 x 77**	**(2-1/2" x 3-00")**
L-54	**64 x 120**	**(2-1/2" x 4-1/2")**

Example:
L - 52

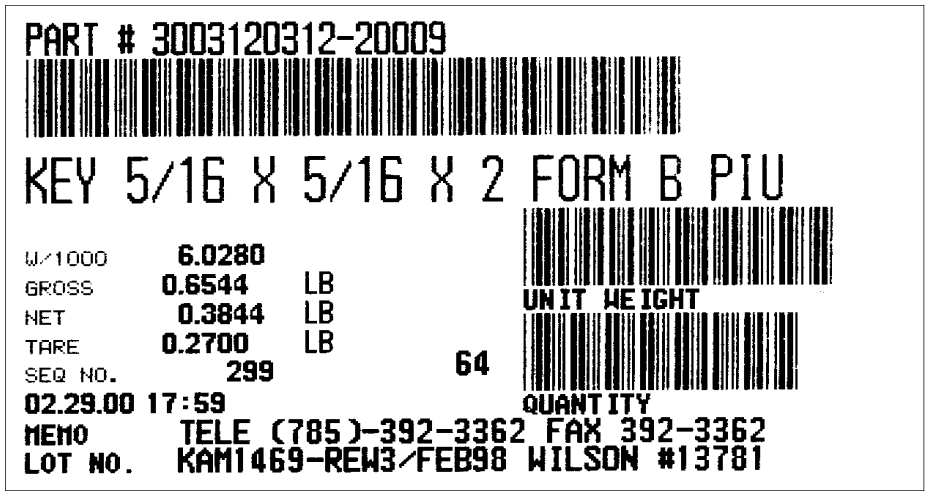


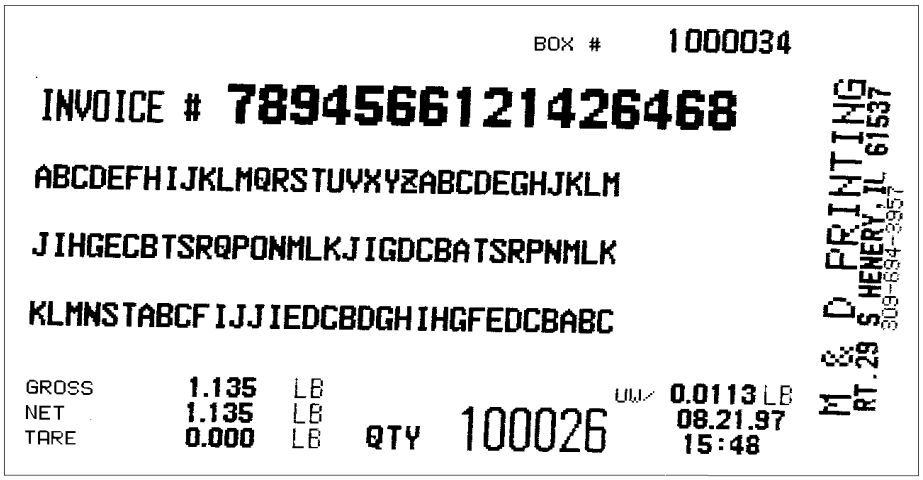
53.

54. 2.9.3. CUSTOM FREE FORMAT SAMPLE LABEL



55. 2.9.3. CUSTOM FREE FORMAT SAMPLE LABEL(CONTINUED)





56.

57. 2.9.4. PROGRAMMABLE DATA FOR EACH LABEL

This chart shows which data fields are printed on the three (3) standard types of labels.

KEY: O = Available, X = N/A

ITEM DATA	ITEM LABEL	TOTAL LABEL	GROSS LABEL	DATA TYPE
ID CODE	O	O	O	TYPE 1
PART NO.	O	O	O	TYPE 2
PARTS NAME	O	O	O	TYPE 2
LOT NO.	O	O	O	TYPE 2
WEIGHT	O	X	X	TYPE 1
WEIGHT UNIT (g/ LB)	O	X	X	TYPE 1
"/" MARK FOR WEIGHT	O	X	X	TYPE 1
RIGHT	O	X	X	TYPE 1
RIGHT UNIT (g/ lb)	O	X	X	TYPE 1
"-" MARK FOR QTY	O	X	X	TYPE 1
QUANTITY	O	O	X	TYPE 1
QUANTITY UNIT (symbol)	O	O	X	TYPE 1
DATE	O	O	O	TYPE 1
TIME	O	O	O	TYPE 1
TASK CONTENTS (in/out/n.a.)	O	O	X	TYPE 1
SUM TOTALING	X	O	X	TYPE 1
SUM COUNT	X	O	X	TYPE 1
GROSS WEIGHT	O	X	X	TYPE 1
GROSS UNIT (g/lb)	O	X	X	TYPE 1
NET WEIGHT	O	X	X	TYPE 1
NET UNIT (g/lb)	O	X	X	TYPE 1
TARE WEIGHT	O	X	X	TYPE 1
TARE UNIT (g/lb)	O	X	X	TYPE 1
SEQUENCE NO. DATA	O	O	X	TYPE 1
BAR-CODE (ID)	O	O	O	TYPE 3
BAR-CODE (PART NO)	O	O	O	TYPE 3
BAR-CODE (LOT NO.)	O	O	O	TYPE 3
BAR-CODE (QTY)	O	O	X	TYPE 3
BAR-CODE (TARE)	O	X	O	TYPE 3
BAR-CODE (RIGHT)	O	X	X	TYPE 3
BAR-CODE (GROSS WEIGHT)	O	X	O	TYPE 3
BAR-CODE (NET WEIGHT)	O	X	O	TYPE 3
FIELD TITLE #1 ~ 3	X	X	O	TYPE 1
FIELD TITLE #4 ~ 7	O	O	O	TYPE 1
FIELD TITLE #8	O	O	X	TYPE 1
FIELD TITLE #9 ~11	O	O	O	TYPE 1

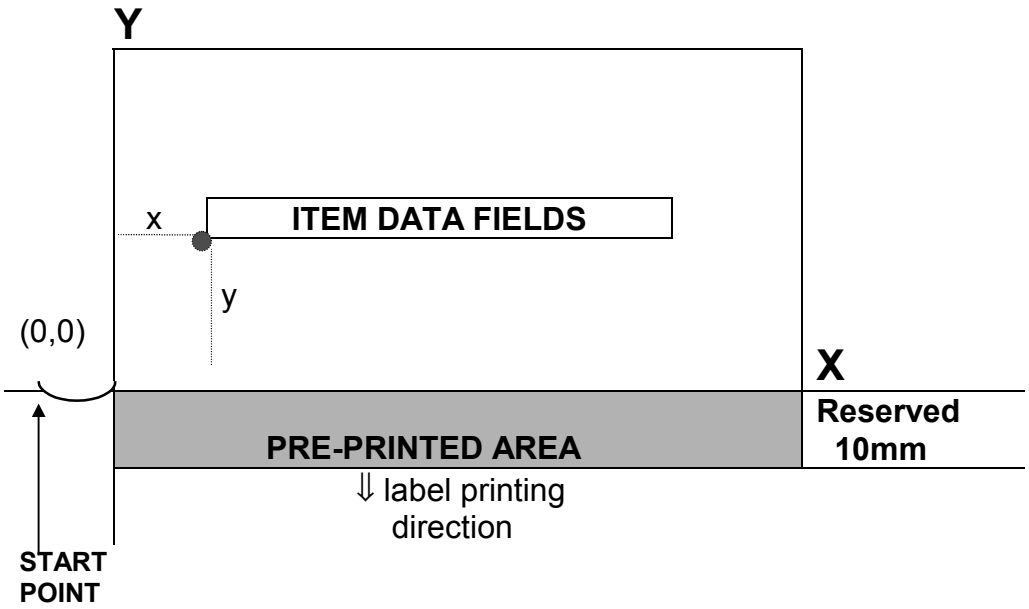
ITEM DATA	ITEM LABEL	TOTAL LABEL	GROSS LABEL	DATA TYPE
FIELD TITLE #12	O	O	X	TYPE 1
FIELD TITLE #13 ~16	O	O	O	TYPE 1
GROSS WEIGHT (GROSS)	X	X	O	TYPE 1
GROSS UNIT (GROSS)	X	X	O	TYPE 1
RIGHT (GROSS)	X	X	O	TYPE 1
NET WEIGHT (GROSS)	X	X	O	TYPE 1
NET UNIT (GROSS)	X	X	O	TYPE 1
TARE WEIGHT (GROSS)	X	X	O	TYPE 1
TARE UNIT (GROSS)	X	X	O	TYPE 1
ADDRESS CONTENTS #1~ 5	O	O	O	TYPE 1

NOTE 1) ✍ *In multiple transaction, item label is printed with [+] or [-] keys. Minus mark is printed on label .*

NOTE 2) ✍ *TASK CONTENTS is "IN " , " OUT " , " NON - ADD ".*

58. 2.9.5. PRINTING POSITION

Printing position of item data is decided with X and Y value.
The X and Y value is the interval from the start point where X=0, Y=0.
Both values are graduated by a dot size. (One dot is X = 0.135mm , Y = 0.135mm)

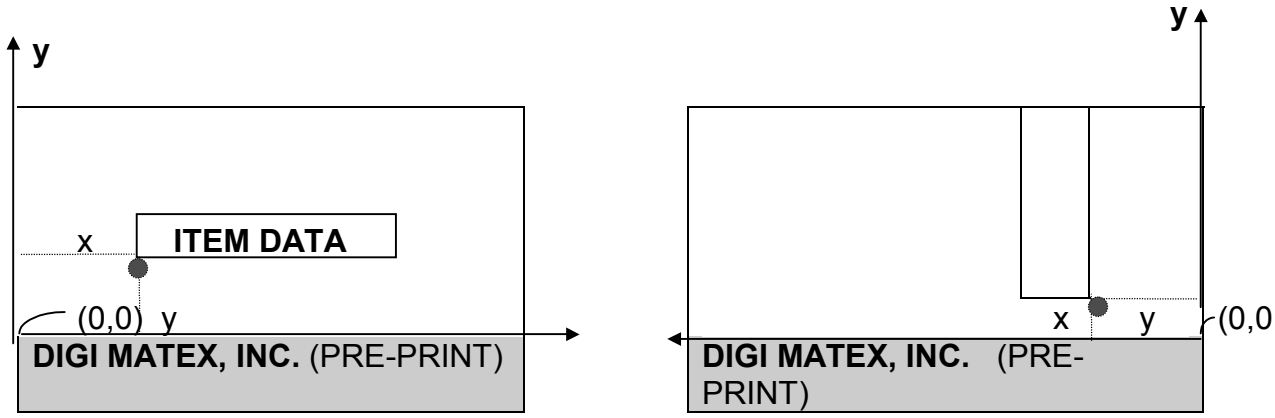


NOTE 1) ✍ *The item data can not be printed on the bottom 10mm of label.*
This is reserved for pre-printed name.

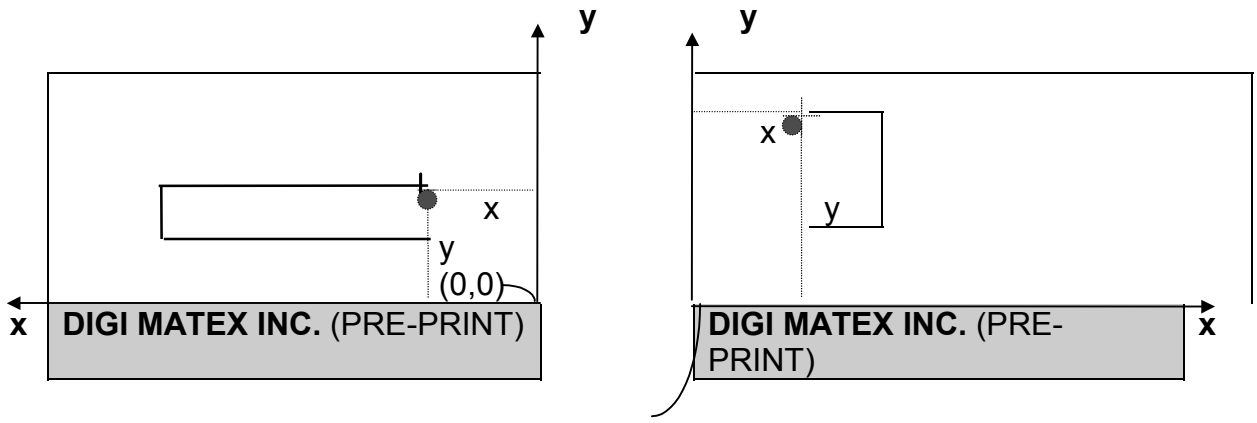
NOTE 2) ✍ *The printing position of item data is set from the start point where X = O and Y = O.*

59. 2.9.6. LABEL ANGLE AND BAR-CODE ANGLE

All item data can be printed in 4 different directions by changing label angle. Bar-code data printing direction can be programmed independently in each label data base.



A1 = 0 degree **A2 = 90 degree**



A-3 = 180 degree **A4 = 270 degree**

(0,0)

*CHARACTER SIZE and MAGN***IFICATIONS (HEIGHT OF BAR-CODE)**

Refer to the list of character sizes in APPENDEX II, III & IV to select the combination of character size and magnification for printing data.

Height of Bar-Code can be selected from: 10mm, 15mm, 20mm, 25mm, 30mm.

60. 2.9.7. DATA TYPE

every field can have different characteristics, therefore, data can vary from lable format to label format.
Three types of data can vary; “human readables”, “Field Titles” and “Bar Codes”.

KEY: O = Available X = N/A

	HUMAN READABLE	TITLES	BAR CODE
DATA TYPE	**TYPE 1**	**TYPE 2**	**TYPE 3**
X position	O	O	O
Y position	O	O	O
Character size	O	O	X
Magnification of character	O	O	X
Line number	X	O	X
Max. digits in the selected line	O	O	O
Height of bar-code	X	X	O
Print angle of bar-code	X	X	O

Line No. and Digit are selectable for Lot NO, Part Name, Part No.
Bar Code Printing Spec’s are selectable.

2.9.8. LABEL FORMAT GRID LAYOUT CHART

DC-150 PRINTING COORDINATES

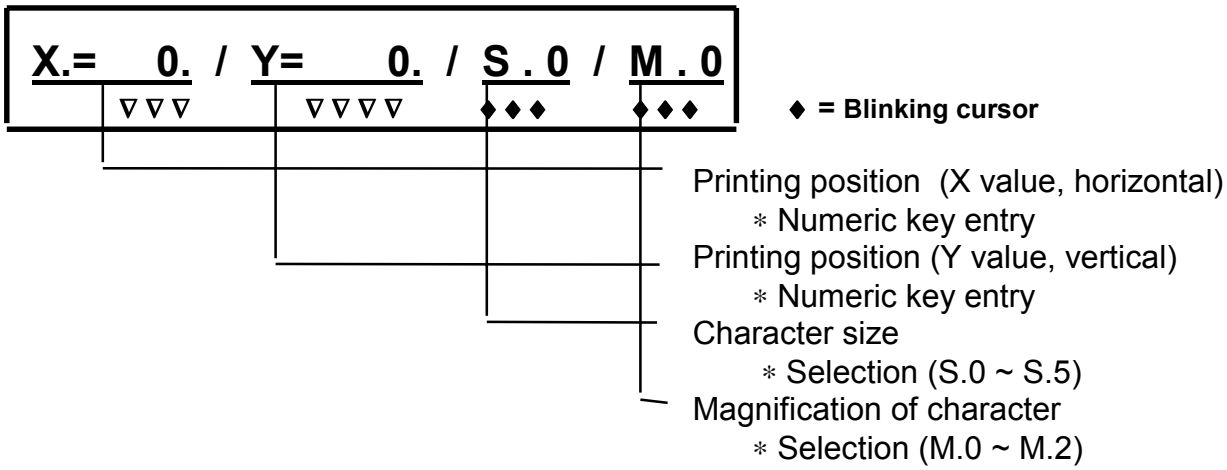
#	DATA FIELD	L LINE NO.	D # OF DIGITS	X POSITION	Y POSITION	S SIZE OF CHAR.	M MAGNIFY	H BAR CODE HEIGHT	A BAR CODE ANGLE
1	PRINT ANGLE °								
2	ID CODE								
3	PART NO.								
4	“ “								
5	“ “								
6	“ “								
7	PARTS NAME								
8	“ “								
9	“ “								
10	“ “								
11	LOT NO.								
12	“ “								
13	“ “								
14	“ “								
15	WEIGHT								
16	WEIGHT UNIT								
17	“/”MARK FOR WT								
18	UNIT WEIGHT								
19	UNIT WT. UNIT								
20	“-”MARK FOR QUAN								
21	QUANTITY								
22	QUANTITY UNITS								
23	DATE								
24	TIME								
25	TASK CONTENTS								
26	SUM TOTAL								
27	SUM COUNT								
28	GROSS WEIGHT								
29	GROSS WT.UNITS								
30	NET WEIGHT								
31	NET WEIGHT UNITS								
32	TARE WEIGHT								
33	TARE WT. UNITS								
34	SEQUENCE NO.								
35	ID BARCODE								
36	PART NO. BARCODE								
37	LOT NO. BARCODE								
38	QUAN. BARCODE								
39	TARE WT.BARCODE								
40	UNIT WT.BARCODE								
41	GROSS WT.BARCODE								
42	NET WT. BARCODE								

#	DATA FIELD	CONTENTS	X POSITION	Y POSITION	S SIZE OF CHAR.	M MAGNIFY	H BAR CODE HEIGHT	A BAR CODE ANGLE
43	TITLE CONTENTS 1							
44	TITLE CONTENTS 2							
45	TITLE CONTENTS 3							
46	TITLE CONTENTS 4							
47	TITLE CONTENTS 5							
48	TITLE CONTENTS 6							
49	TITLE CONTENTS 7							
50	TITLE CONTENTS 8							
51	TITLE CONTENTS 9							
52	TITLE CONTENTS 10							
53	TITLE CONTENTS 11							
54	TITLE CONTENTS 12							
55	TITLE CONTENTS 13							
56	TITLE CONTENTS 14							
57	TITLE CONTENTS 15							
58	TITLE CONTENTS 16							
59	GRS. WT(GRS LABEL)							
60	GRS UN(GRS LABEL)							
61	NET WT. (GRS LABEL)							
62	NET UN(GRS LABEL)							
63	TARE WT(GRS LABEL)							
64	TARE UN(GRS LABEL)							
65	ADDRESS CONTENT 1							
66	ADDRESS CONTENT 2							
67	ADDRESS CONTENT 3							
68	ADDRESS CONTENT 4							
69	ADDRESS CONTENT 5							

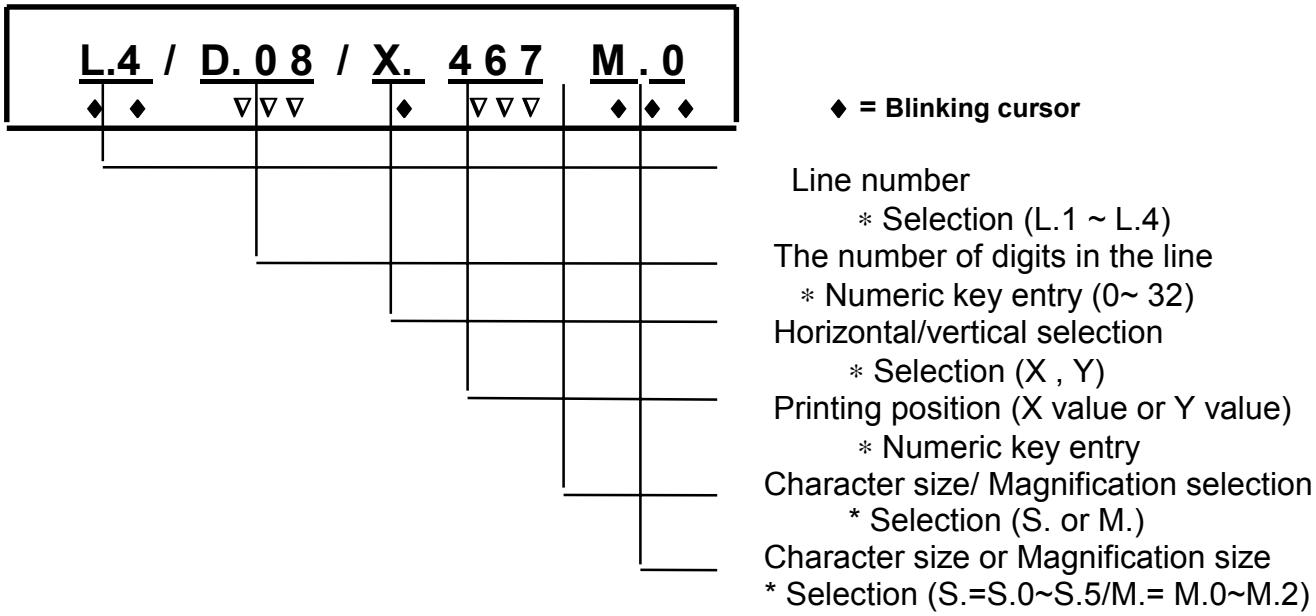
61.

62. 2.9.9. PROGRAMMING SCREEN

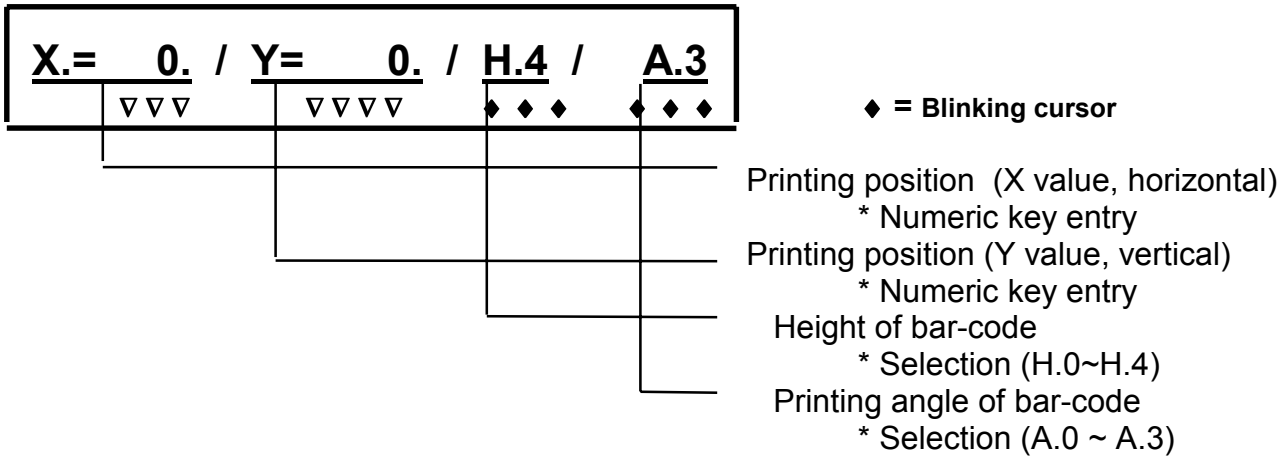
Programming screen for data type 1 - Human Readables.


X.= 0. / Y= 0. / S . 0 / M . 0
♦ = Blinking cursor
Printing position (X value, horizontal)
∗ Numeric key entry
Printing position (Y value, vertical)
∗ Numeric key entry
Character size
∗ Selection (S.0 ~ S.5)
Magnification of character
∗ Selection (M.0 ~ M.2)

Programming screen for data type 2 - Human Readables


L.4 / D. 0 8 / X. 4 6 7 M . 0
♦ = Blinking cursor
Line number
∗ Selection (L.1 ~ L.4)
The number of digits in the line
∗ Numeric key entry (0~ 32)
Horizontal/vertical selection
∗ Selection (X , Y)
Printing position (X value or Y value)
∗ Numeric key entry
Character size/ Magnification selection
* Selection (S. or M.)
Character size or Magnification size
* Selection (S.=S.0~S.5/M.= M.0~M.2)

Programming screen for data type 3 - Bar Code


X.= 0. / Y= 0. / H.4 / A.3
♦ = Blinking cursor
Printing position (X value, horizontal)
* Numeric key entry
Printing position (Y value, vertical)
* Numeric key entry
Height of bar-code
* Selection (H.0~H.4)
Printing angle of bar-code
* Selection (A.0 ~ A.3)

* Selection of height of bar-code
H.0 = 10mm, H.1 = 15mm, H.2 = 20mm, H.3 = 25mm, H.4 = 30mm)
* Selection of printing angle of bar-code
A.0 = 0 degree, A.1 = 90 degree, A-2 =180 degree, A.3 = 270 degree

63. 2.9.10. KEY FUNCTION

[UNIT WEIGHT/→] key and **[TARE←]** key
To select item data in loop routine
To move the cursor in a display

[+] and **[–]** key
To select data when triangle cursor indicator is blinking

[AUTO /MANUAL] key
To move back to the previous screen.

[SPACE / kg/lb.] key
To print the test label of *item label* in item data setting

[CODE / RETRY] key
To print the test label of *total label* in item data setting.

[M NET/GROSS] key
To print the test label of *gross label* in item data setting.

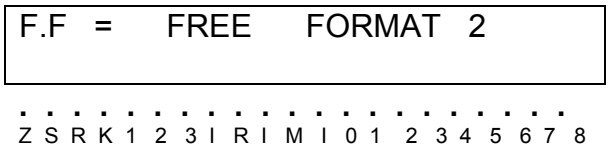
[PIECES] key
To print the test label of *item label with minus mark* for quantity in item data setting

64. 2.9.11. PROGRAMMING OPERATION

1. Enter PRG mode and select free format.

2. Press **[∗/ENTER]** key.

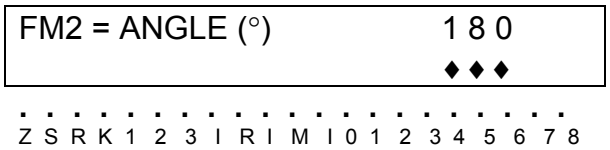
3. Select FREE FORMAT # by pressing **[UNIT WEIGHT→]** or **[TARE←]** key.



4. Press **[∗/ENTER]** key.

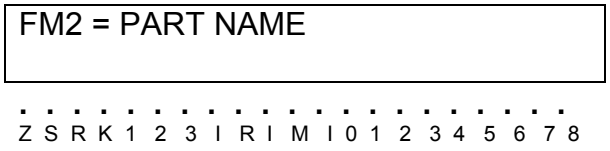
5. Press **[∗/ENTER]** key.

.6. Select label angle by pressing **[+]** or **[–]** key.



7. Press **[∗/ENTER**] key.
(Ready for setting the print positions for item data)

8. Select item data by pressing **[UNIT WEIGHT→]** or **[TARE←]** key.

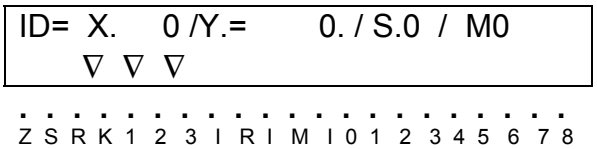


Note) ✍ It is possible to omit any factors, if not necessary.

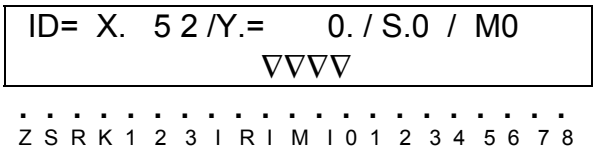
Start for **A. Programming operation for item data (data type 1)**

9. Select programming factor.
Ex) ID CODE

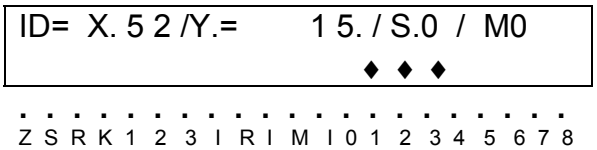
10. Press **[∗/ENTER]** key.



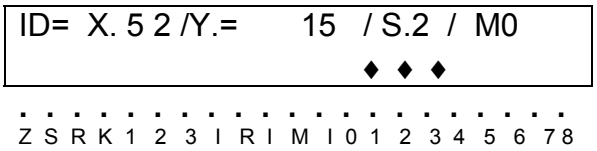
11. Enter X value and press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) X value = 52



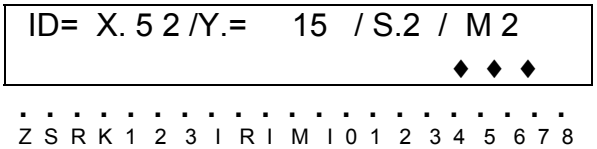
12. Enter Y value and press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) Y value = 15



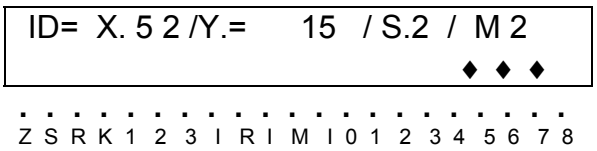
13. Select character size by pressing **[+]** or **[–]** key & press **[UNIT WEIGHT→]** key to move Cursor.
i.e.) Character size = S2



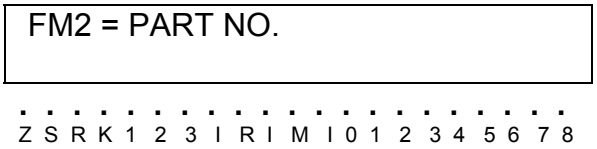
14. Select magnification by pressing **[+]** or **[–]** key.
i.e.) Character size = M2



15. Press **[M]**, **[SPACE**] and **[CODE]** keys to check print position with test label
i.e.) Character size = M2



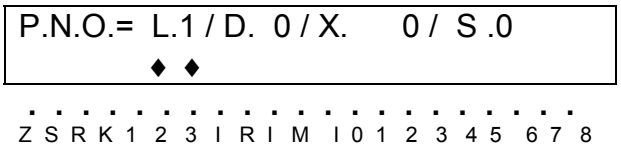
16. Press **[∗/ENTER]** key to enter the data into the memory file.
Ready for setting the next item data



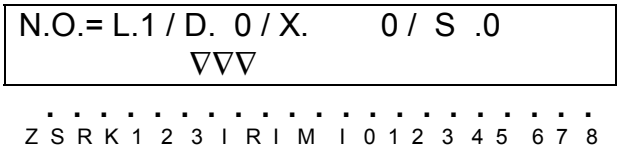
Repeat for **B. Programming operation for item data (data type 2)**

9. Select programming factor.
I.e.) PART NO.

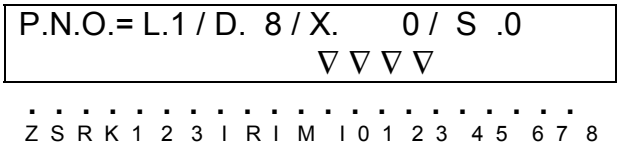
10. Press **[∗/ENTER]** key.



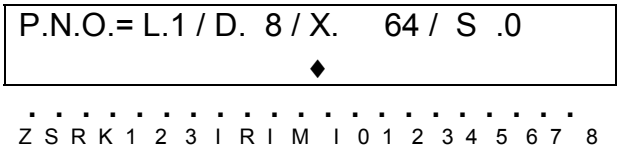
11. Select line no. by pressing **[+]** or **[–]** key and press **[UNIT WEIGHT→]** key to move cur.
i.e.) Line no. = 1



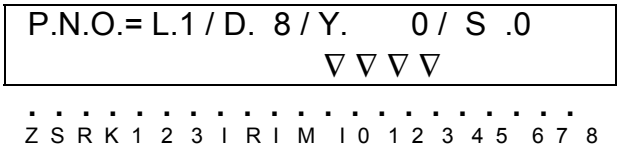
12. Enter the number of digits for the selected line and press **[UNIT WEIGHT→]** key to move Cursur to value entry.
i.e.) The number of digits = 8



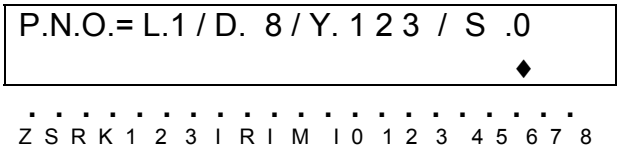
13. Enter X value and press **[TARE←]** key to move the cursor back to X/Y selection.
i.e.) X= 64



14. Press **[+]** or **[–]** key to enter Y value & press **[UNIT WEIGHT→]** key to move cursor to right.



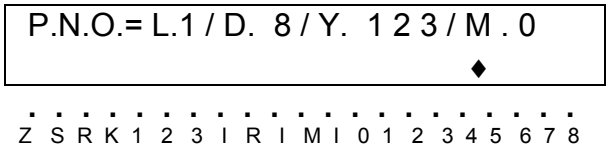
15. Enter Y value and press **[UNIT WEIGHT→]** key to move the cursor to character size entry.
i.e.) Y = 123



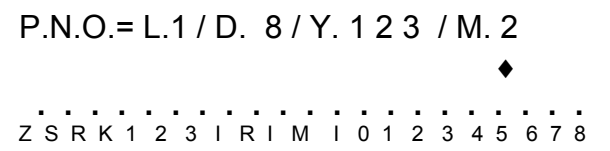
16. Select character size and press **[TARE←]** key to move cursor back to S./M. selection.
i.e.) Character size = S.1

CONTINUE

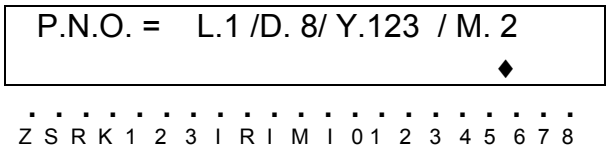
17. Press **[+]** or **[–]** key to enter M. value & press **[UNIT WEIGHT→]** key to move Cursor to right.



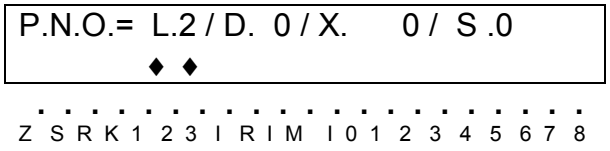
18. Select Magnification value.
I.e.) M. =2



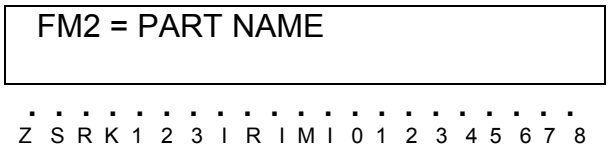
20. Press **[M], [SPACE]** and **[CODE]** keys to check print position with test label



21. If you need to set the data for line 2 ~ 4, press **[TARE←]** key to move cursor to line no. selection and set the data as the same program procedure.



22. Press **[∗/ENTER]** key to enter the data into the memory file.
(Ready for setting the next item data)

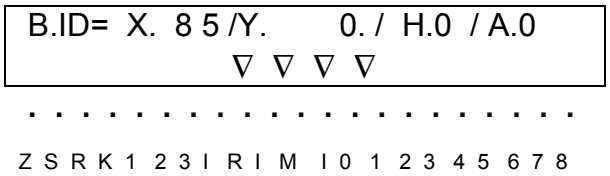


***Repeat for* C. Programming operation for item data (data base type 3)**

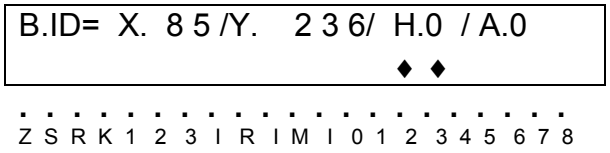
9. Select programming factor.
I.e.) BAR-CODE (ID)

10. Press **[∗/ENTER]** key.

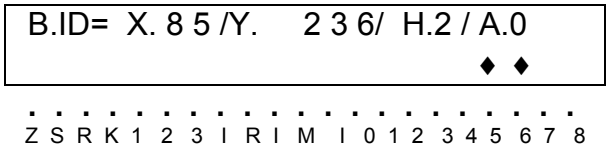
11. Enter X value and press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) X value = 85



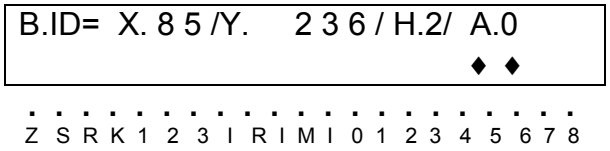
12. Enter Y value and press **[UNIT WEIGHT→]** key to move the cursor to right.
i.e.) Y value = 236



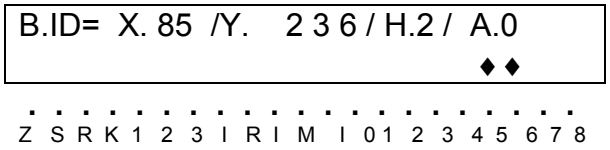
13. Select height of barcode by pressing **[+]** or **[–]** key and press [RIGHT→] key to move cursor.
i.e.) Height of bar-code = 25mm (2)



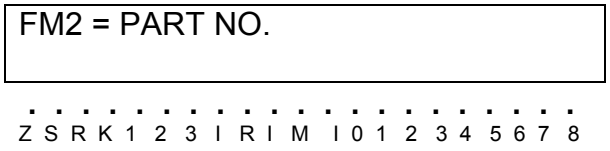
14. Select angle of barcode by pressing **[+]** or **[–]** key i.e.) Angle of bar-code = 0 degree (0)



15. Press **[MNET/GROSS]**, **[SPACE]** and **[CODERETRY]** keys to check print position with test label.



16. Press **[∗/ENTER]** key to enter the data into the memory file.



65. 2.9.12. PROGRAMMING PROCEDURE (USING COPY FUNCTION)

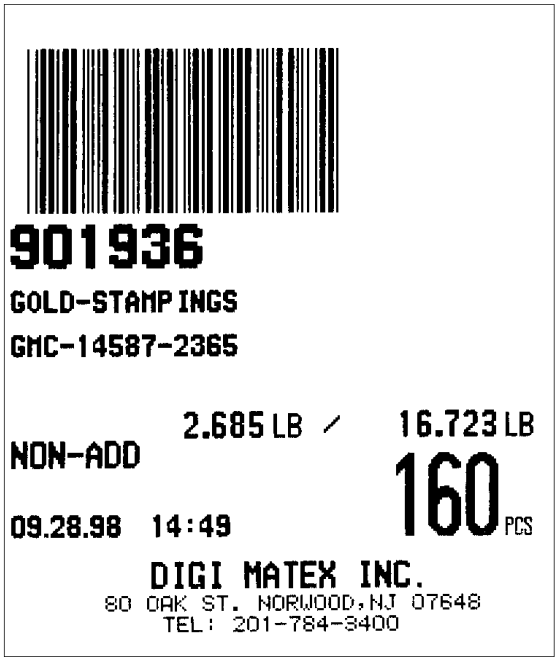
A. After designing the label format, select the most similar format from the standard formats in appendix I.

B. List up the print data to change from the standard format. (deletion, addition, change of position and character size)

C. Set up the label size in maintenance mode.

D. Copy the standard format in **FORMAT-COPY** in program mode.

E. Change the format in **FREE FORMAT** in program mode.



Standard format #3

Standard format #6

B. THE LIST OF LABEL FORMAT TO CHANGE

DATA	ACTION	Digits no.	X position	Y position	S size	M size
ID CODE	DELETE		0 ⇒ 0	162 ⇒ 0	S1	M2
P. NO. (L1)	DELETE	32	0 ⇒ 0	210 ⇒ 0	S1	M1
LOT NO. (L1)	DELETE	32	0 ⇒ 0	134 ⇒ 0	S1	M1
PART NAME (L1) (L2)	CHANGE ADD	32 ⇒ 16 0 ⇒ 16	0 ⇒ 0 0 ⇒ 0	238 ⇒ 275 0 ⇒ 230	S1 S1	M1 M1
BARCODE(ID)	ADD		0 ⇒ 100	0 ⇒ 150	H0	A0
TEXT 6	ADD		0 ⇒ 0	0 ⇒ 150	S1	M1

C. Set “64mm x55mm” on address 34 (size of label format) in PRINT SPEC in MAINTENANCE MODE. Refer to **3-3 METHOD OF PROGRAM**.

D. Copy the standard format #2 to free format #1. Refer to **2-8 COPY OF STANDARD FORMAT**.

E. Change the print data of label format data. Refer **to 2-9 FREE FORMAT PROGRAM**.
E-1 Select free format ..... No.1.
E-2 Set angle of label format ..... 0 degree
E-3 Change the print position for ID code at (X=0, Y=0) to delete.
E-4 Change the print position for part no. at (X=0, Y=0) to delete.
E-5 Change the print position for lot no at (X=0,Y=0) to delete.
E-6 Change the data for part name. (L1/ D=16, X=0, Y=275, S1, M1)
(L2/ D=16, X=0, Y=230, S1, M1)
E-7 Change the data for barcode of ID code. (X=100, Y=150, H=0, A=0)
E-8 Change the data for text 6. (X=0, Y=150, S1, M1)

NOTE)✍ After changing each print data, we recommend, you would check with the test print if the print position and character size are fit for the layout. If they are not, adjust the print position in programming step.

SAMPLE OF TEST LABEL

66. 2.10. SHELF LOCATION LABEL PROGRAM

To know the location of stock, each item code can be assigned shelf location number. DC-150 can print the shelf location label for each item code in Check Mode to put on the shelves where the stock is stored.

DC-150 has no standard format, use one free format for this shelf location label. The label format is to be developed with the same programming steps as free format.

67. 2.10.1. LABEL SIZE

You can select label size from 11 size in Spec. 34, which is in common with label size of free format. (Ref. to 2.9.2. LABEL SIZE in Free Format Program)

68. 2.10.2. PROGRAMMABLE ITEM DATA

In shelf location label, you can program angle, print factors, print position, and character size of selected factors from the following list.

PRINTING FACTORS	**DATA TYPE**
ID CODE	TYPE 1
PARTS NO.	TYPE 2
PARTS NAME	TYPE 2
UNIT WEIGHT	TYPE 1
LOCATION NO.	TYPE 1
THRESHOLD	TYPE 1
DATE	TYPE 1
TIME	TYPE 1
BAR-CODE (ID)	TYPE 3
BAR-CODE (PARTS NO.)	TYPE 3
FIELD TITLE NO.1 ~ 16	TYPE 1

69. 2.10.3. PRINT POSITION

The printing position of item data on shelf location label is the same as on free format.
(Ref. to 2.9.4 PRINT POSITION in Free Format Program)

70.

71. 2.10.4. LABEL ANGLE and BAR-CODE ANGLE

Shelf location label and bar-code can be printed in 4 different angles in the same as free format.
(Ref. to 2.9.5 Label Angle and Bar-code *Angle in Free Format Program.)*

72. 2.10.5. CHARACTER SIZE and MAGNIFICATIONS

Character size and magnification value in shelf location label is the same as in free format.
(Refer to 2.9.6 Character size and magnifications in Free Format Program)

73. 2.10.6. DATA TYPE

The data type of item data on shelf location label is the same as free format.
(Refer to 2.9.7 Data type in Free Format Program)

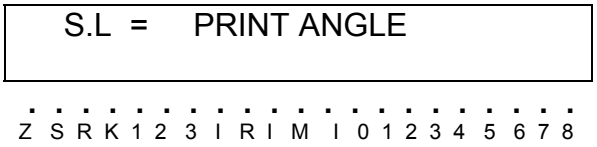
74. 2.10.7. PROGRAMMING SCREEN

The programming screens for item data are the same as free format.
(Refer to 2.9.8 Programming screen in Free Format Program)

75. 2.10.8. PROGRAMMING PROCEDURE

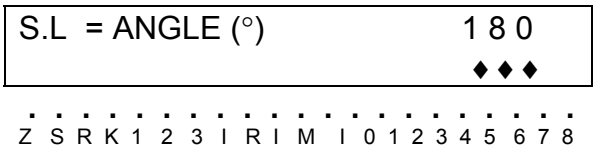
1. Enter PRG mode and select SHELF LOCATION label heading.

2. Press **[∗/ENTER]** key.

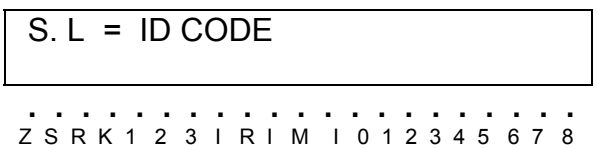


3. Press **[∗/ENTER]** key.

4. Select printing angle of label by pressing **[+]** or **[–]** key.



5. Press **[∗/ENTER]** key.



6. Select printing factors by pressing

[TARE←] or **[UNIT WEIGHT→]** key.

S.L = PART NAME

Z S R K 1 2 3 I R I M I 0 1 2 3 4 5 6 7 8

7. Program each item data with the same operation as free format setting. Refer to "Programming operation" in Free Format Program.

*NOTE)✍ **[Space kg/lb.]** key is used for test printing of shelf location label.*

76. 2.10.9. PROGRAM PROCEDURE

A. Make list of data required for shelf location label. Then layout the label roughly.
B. Set up the label size in *maintenance mode*.
C. Set the format in *"Free Format Program"* in program mode.

A-1 LABEL FORMAT

Sample of shelf location label

A-2. THE LABEL FORMAT LIST FOR THE SAMPLE LABEL

Print angle = 270

DATA	Digits no.	X position	Y position	S size	M size
ID CODE		200	545	S2	M2
P. NO. (L1)	32	50	650	S1	M1
P NAME (L1)	32	100	650	S1	M1
LOCATION NO.		380	686	S1	M2
BARCODE (ID)		280	750	H0	A3
TEXT 4		100	750	S1	M2
TEXT 5		50	750	S1	M1
TEXT 6		200	50	S1	M2

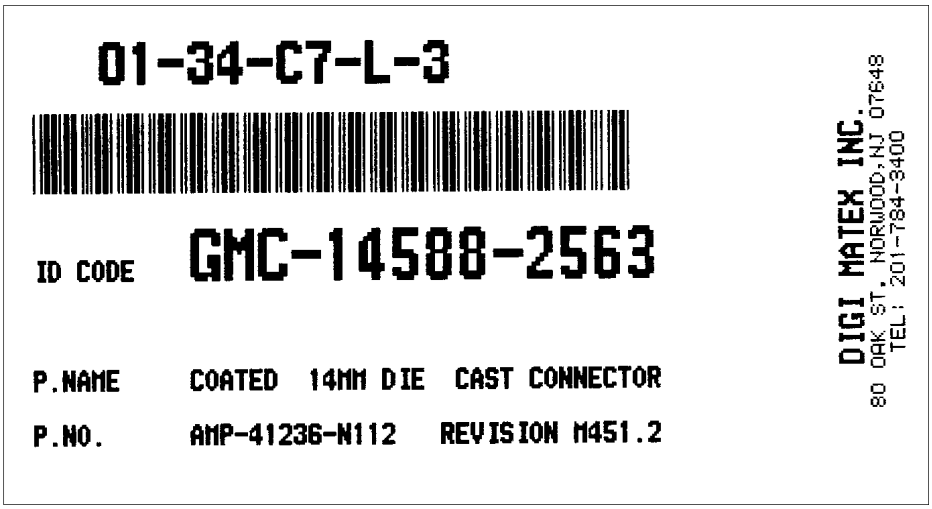
B. Set “64mm x120mm” on address 34 (size of label format) in PRINT SPEC in MAINTENANCE MODE. Refer to **3-3 METHOD OF PROGRAM**.

C. Change the print data of label format data. Refer **to 2-10 FREE FORMAT PROGRAM**.

E-1 Set angle of label format ..... 270 degree
E-2 Set the data for ID code. (X=200, Y=600, S2, M2)
E-3 Set the data for part code. (L1/ D=32, X=50, Y=600, S1, M1)
E-4 Set the data for part name. (L1/ D=32,X=100, Y=600, S1,M1)
E-5 Set the data for location no. (X=380, Y=686, S1, M2)
E-6 Set the data for bar-code of ID code (X=280, Y=750, H0, A3)
E-7 Set the data for text 4. (X=100, Y=750, S1, M2)
E-8 Set the data for text 5. (X=50, Y=750, S1, M1)
E-9 Set the data for text 6. (X=200, Y=50, S1, M1)

NOTE) ✍ In each step on setting print data, we recommend, you would check with the test print if the print position and character size are fit. If they are not, adjust the print position before setting the next data.

SAMPLE OF TEST LABEL



77. 2.11. SHELF LOCATION LIMIT PROGRAM

The maximum available alpha/numeric digits of shelf location can be set, according to your definition of the stock room. Rows, Racks, Shelves, Bins, available

By setting up the maximum limit for each digit, you compose the shelf location number.
If you enter shelf location data which does not exist in your definition, the error buzzer notices the miss-entry and the invalid data cannot be entered in the memory file.

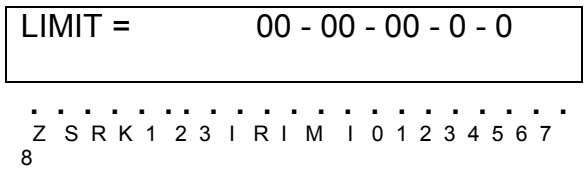
Programmable character and the available characters

Programmable characters	available characters for a set
0	0
1 9	0, 1 0, 1, 2, 3, 4, 5 , 6, 7, 8, 9
A Z	0, 1, 2, 3, 4, 5, 6, 7, 8 , 9, A 0, 1, 2, 3, 4, 5, 6, 7, 8 , 9, A ~ Z

Programming procedure for Range of Shelf location number

1. Enter PRG mode and select SHELF LOCATION LIMIT.

2. Press **[∗/ENTER]** key.



3. Enter data.
I.e.) 01-15-09-A-Z

4. Press **[∗/ENTER]** key

78. 2.12. ADDRESS CONTENTS PROGRAM

DC-150 can print address data on label format #7 which has printing area for address contents.

TEN Address or Memos can be programmed. The data base file has 5 lines of 32 characters per line. Select address file number in OPR mode, with SHIFT DOWN / N /ADDRESS KEY. Remote address database can be interfaced through RS-232 link for thousands of addresses or messages. Consult Factory.

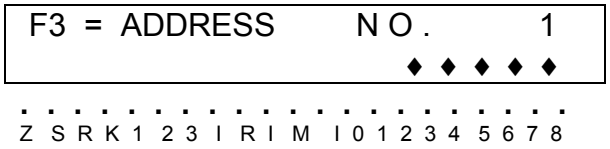
79. 2.12.1. PROGRAMMING OPERATION FOR ADDRESS CONTENTS

1. Enter PRG mode and select Address contents.

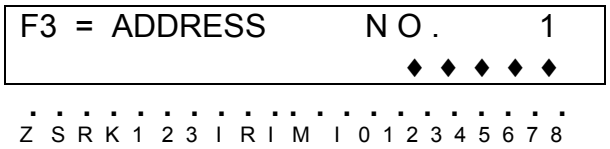
2. Press **[∗/ENTER]** key.

3. Select file no. by pressing **[+]** or **[–]** Key.
I.e.) File no. = 3

4. Press **[∗/ENTER]** key.



5. Select address no. by pressing **[+]** or **[–]** key.
I.e.) address no. = 1



6. Press **[∗/ENTER]** key.

7. Enter the data.
I.e.) 80 Oak St, Norwood, NJ

8. Press **[∗/ENTER]** key.

9. Select other lines (address) with **[+]** or **[–]** key,
if you need to program other line.
I.e.) address no. =2

10. Program address data with the same operation as programming operation in address no.1.

2.12.2. DC-150 ADDRESS DATABASE

Address # 10 in the DC-150, withsoftware version2.00 & higher (only) is now used to receive data from Address Software, (requires dedicated computer and connected to RS-232 port) or with a bar code using the following line header.

Line 1 ZA
Line 2 ZB
Line 3 ZC
Line 4 ZD
Line5 ZE

SET-UP

ON LAPTOP

Select Program
Select Function

ON SCALE

NOTE 1:✍ Print Spec #31 FREE FORMAT = N (**If set to Y than only FREE FORMAT labels will be produced)**

NOTE 2: ✍ Address locations # 1-9 are available internal programable memory. Address location # 10 is now used as a temporary location for address IMS. (See Below)

1. Select print format #7.
2., Select #11 to a maximum of 9999 to access the Address Data Base.
3. Press Print Key.

ON SCALE USING SCANNER

NOTE: SAME AS ABOVE

1. Select print format #7.
2. Select address # 10 ONLY.
3. Scan each line of information, which contain the proper headers listed above.
4. Print a label.

80. 2.12.3. DELETION OF PROGRAMMED DATA

(6) Select address no. and press **[∗/ENTER]** key to call the programmed address data.

Note) ✍ **[TARE←]** and **[UNIT WEIGHT→]** keys are used for scrolling the display of programmed data to left or right sides to check the data.

2. Press **[CLEAR]** key to enter the deletion screen.

3. Press **[Y]** key to execute the deletion of the data.
The display is back to the address no. heading.
Press **[N]** key to escape the deletion screen.
The display is back to the previous screen.

3. MAINTENANCE MODE

Set Specifications Of Scale And Memory Files.

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3.2 KEY FUNCTIONS IN MAINTENANCE MODE
3.3 SET SPEC CODES
3.4 DELETE PROGRAMMED DATA
3.5 PRINT ADJUSTMENT
3.6 AUTO JOB PROGRAMMING
3.7 DATA TRANSFER
3.8 MODEM COMMUNICATION
3.9 PRINTING SPEC LIST

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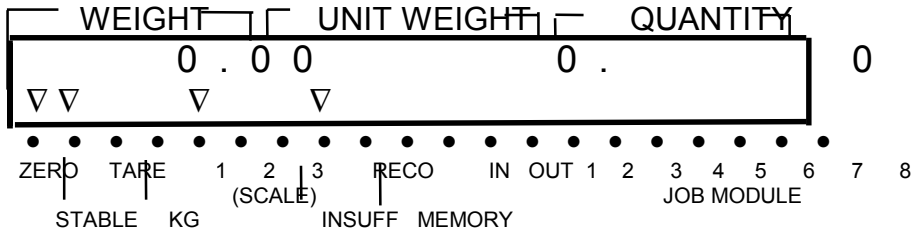
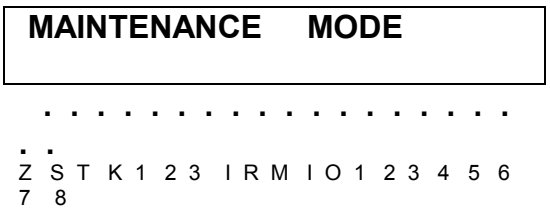
2. HOW TO ENTER MAINTENANCE MODE

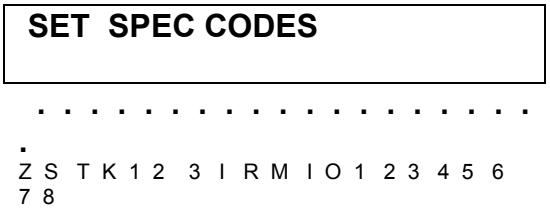
When the operator turns on the main switch, this standard operation mode screen will be displayed.



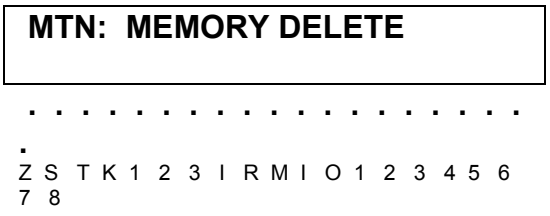
1. Change to Maintenance mode by pressing [MODE] key.



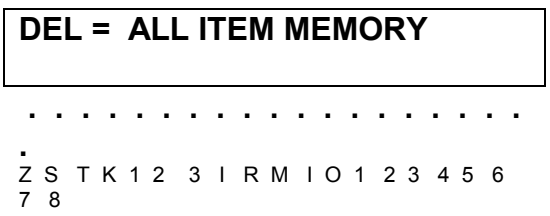
2. Enter Maintenance mode by pressing [ENTER] key.



3. Select programming data by pressing [LEFT ←] or [RIGHT→] key.



4. Enter programming data by pressing [ENTER] key.



3. KEY FUNCTIONS IN MAINTENANCE MODE

[MODE] Key

To return to the first screen of each mode without saving programmed data.

[AUTO/MANUAL] key

To return to the previous screen in programming without saving programmed data.

[*/ENTER] key

To enter the next screen in each heading.
To enter the programmed data into memory file.
To execute the data transaction.
To print SPEC report.

[TARE ←] and [UNIT WEIGHT →] key

To select the headings in loop routines.
To move the cursor to left/right when there are multiple cursors in a display.

[+] and [–] key

To select the data, when cursor (triangle indicator) is blinking.

CURSORS

In Programming mode, cursors indicate the programmable item. There are two kinds of cursors which are used to classify the programable data.

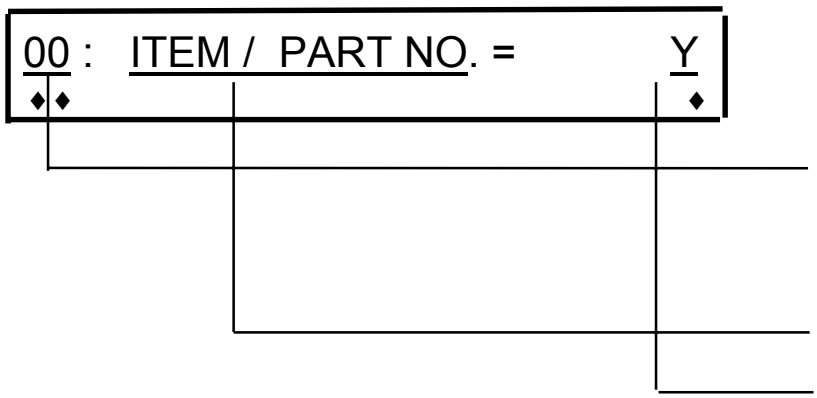
1.) Solid light cursor ..... The data above a solid light cursor can be programmed by **key entry.**

2.) Blinking cursor .... The data above a blinking cursor can only be selected from some pre-determined values. The selection can be made by pressing **[+] and [–] keys.**

SET SPEC CODES

You can set the way the scale operates by selecting various specification codes. The SPECS are divided
into groups by their functions: DISPLAY, REPORTS, PRINT, PERIPHERAL, and MISC.

Programming screen for SPECs



ADDRESS NO.
Press **[+]** key to go ahead.
Press **[–]** key to go back.

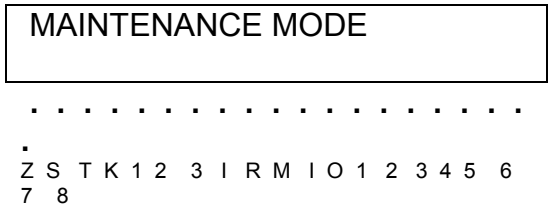
DEFINITION OF SPEC

SELECTION ITEM
Make selection with **[+]** or **[–]** keys.

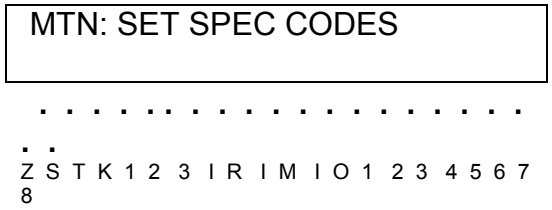
Note) **[TARE ←]]UNIT WEIGHT→]** keys move cursor.
Note) **[∗/ENTER]** key works for entering the data into the memory.

Programming operation

1. Select maintenance mode by pressing **[MODE]** key.



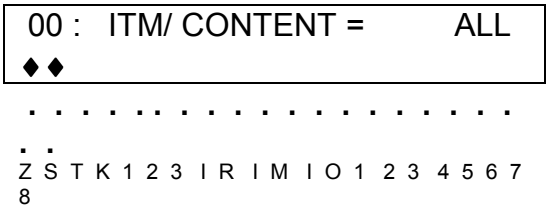
2. Press **[∗/ENTER]** key.



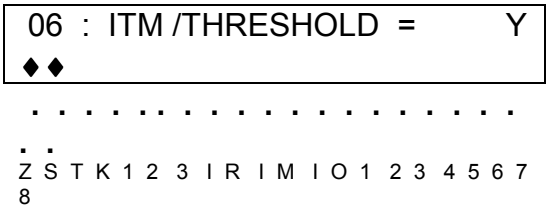
3. Press **[∗/ENTER]** key.

4. Select the group of the SPECs by pressing **[TARE ←]** or **[UNIT WEIGHT→]** keys.

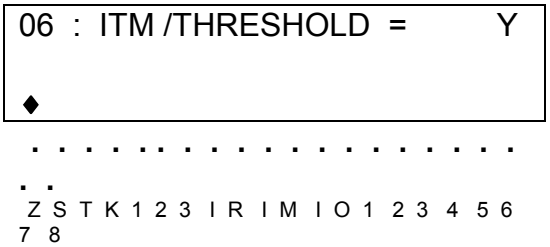
5. Press **[∗/ENTER]** key.



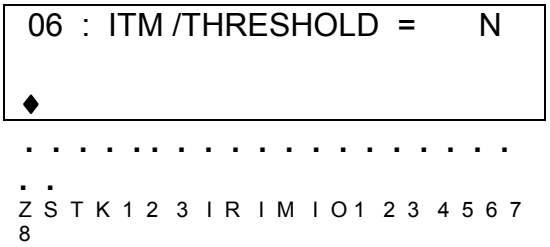
6. Press **[+]** key. (6times)



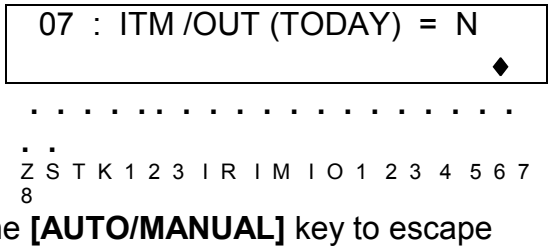
7. Press **[UNIT WEIGHT→]** key.



8. Press **[+]** key.



9. Press **[∗/ENTER]** key to enter the data to memory. (Ready for entering the next spec)



Note) * After you have changed SPECs, press the **[AUTO/MANUAL]** key to escape from programming screen of SPECs.

Note) * PERIPHERAL SPECs are divided into SCANNER, FORCE BALANCE, RS-232C, MODEM and MISC. You can select each SPEC group with the **[UNIT WEIGHT→]** and **[TARE ←]** keys.

.Note) * If you wnat to jump to a different SPEC, enter the SPEC number and press the **[∗/ENTER]** key to advance.

DISPLAY SPECS

SPEC 00: CANCELLATION OF SUB TOTAL DISPLAY
(This activates only when SPEC 22 of PRINT spec is set to “NON”)

AUTO : Auto cancellation
MANUAL : Manual cancellation

*** _____ = Default setting**

REPORT SPECS

SPEC 00 ; Print items in report (This activates only when SPEC 00 of REPORT spec is set to “SELECT”)

ALL : All items
SELECT : Selected items

SPEC 01 ; Print part no. on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 02 ; Printing part name on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 03 ; Print unit weight on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 04 ; Print shelf location no. on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 05 ; Print inventory on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 06 ; Print threshold on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 07 ; Print daily out-count (shipping) on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 08 ; Print in-count (receiving) on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 09 ; Print tare weight on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 10 ; Print set point value on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 11 ; Print selected scale no. on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 12 ; Print auto job no. for shipping operation on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 13 ; Print auto job no. for receiving operation on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 14 ; Print auto job no. for counting operation on item report
(This activates only when SPEC 00 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 15 ; PRINT TODAY’S MOVEMENT REPORT

ALL : All items
SELECT : Selected items

SPEC 16 ; Print part no. on today’s movement report
(This activates only when SPEC 15 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 17 ; Print part name on today’s movement report
(This activates only when SPEC 15 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 18 ; Print unit weight on today’s movement report
(This activates only when SPEC 15 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 19 ; Print shelf location no. on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 20 ; Print inventory on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 21 ; Print threshold on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 22 ; Print daily out-count (shipping) on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 23 ; Print in-count (receiving) on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 24 ; Print tare value on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 25 ; Print set point value on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 26 ; Print selected scale no. on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 27 ; Print auto job no. for shipping operation on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 28 ; Print auto job no. for receiving operation on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 29 ; Print auto job no. for counting operation on today's movement report
(This activates only when SPEC 15 of REPORT spec is set to "SELECT")
Y : Allow
N : Inhibit

SPEC 30 ; PRINT THRESHOLD REPORT

ALL : All items
SELECT : Selected items

SPEC 31 ; Print part no. on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 32 ; Print part name on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 33 ; Print unit weight on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 34 ; Print shelf location no. on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 35 ; Print inventory on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 36 ; Print threshold on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 37 ; Print daily out-count (shipping) on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 38 ; Print in-count (receiving) on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 39 ; Print tare value on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 40 ; Print set point value on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)
Y : Allow
N : Inhibit

SPEC 41 ; Print selected scale no. on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)

Y : Allow
N : Inhibit

SPEC 42 ; Print auto job no. for shipping operation on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)

Y : Allow
N : Inhibit

SPEC 43 ; Print auto job no. for receiving operation on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)

Y : Allow
N : Inhibit

SPEC 44 ; Print auto job no. for counting operation on threshold report
(This activates only when SPEC 30 of REPORT spec is set to “SELECT”)

Y : Allow
N : Inhibit

PRINT SPECS

SPEC 00 : PRINT BAR-CODE FOR ID CODE

Y : Allow
N : Inhibit

SPEC 01 : The first digit of ID code data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
13 L : 13 digit
14 L : 14 digit
15 L : 15 digit
16 L : 16 digit

SPEC 02 : The last digit of ID code data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
13 L : 13 digit
14 L : 14 digit
15 L : 15 digit
16 L : 16 digit

SPEC 03 : Print human readable value under the bar-code (ID code)

Y : allow
N : Inhibit

SPEC 04 : Print bar-code for part no.

Y : Allow
N : Inhibit

SPEC 05 : The first digit of part no. data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
32 L : 32 digit

SPEC 06 : The last digit of part no. data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
32 L : 32 digit

SPEC 07 : Print human readable value under the bar-code (part no.)

Y : allow
N : Inhibit

SPEC 08 : Print bar-code for Lot no.

Y : Allow
N : Inhibit

SPEC 09 : The first digit of lot no. data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
32 L : 32 digit

SPEC 10 : The last digit of lot no. data printed in bar-code

0 L : 0 digit
1 L : 1 digit
2 L : 2 digit
3 L : 3 digit
4 L : 4 digit
5 L : 5 digit
6 L : 6 digit
7 L : 7 digit
8 L : 8 digit
9 L : 9 digit
10 L : 10 digit
11 L : 11 digit
12 L : 12 digit
32 L : 32 digit

SPEC 11 : Print human readable value under the Lot no. bar-code

Y : Allow
N : Inhibit

SPEC 12 : Print bar-code for Quantity

Y : Allow
N : Inhibi

SPEC 13 : Print human readable value under the bar-code (Quantity)

Y : Allow
N : Inhibit

SPEC 14 : Print bar-code for unit weight

Y : Allow
N : Inhibit

SPEC 15 : Print human readable value under the unit weight bar-code

Y : Allow
N : Inhibit

SPEC 16 : Print bar-code for tare weight

Y : Allow
N : Inhibit

SPEC 17 : Print human readable value under the tare weight bar-code

Y : Allow
N : Inhibit

SPEC 18 : Print bar-code for gross weight

Y : Allow
N : Inhibit

SPEC 19 : Print human readable value under the gross weight bar-code

Y : Allow
N : Inhibit

SPEC 20 : Print bar-code for net weight

Y : Allow
N : Inhibit

SPEC 21 : Print human readable value under the net weight bar-code

Y : Allow
N : Inhibit

SPEC 22 : Print label

ALL : All tasks
OUT : In shipping operation
IN : In receiving operation
N/A : Non -add (counting operation)
I&O : In shipping and receiving operation
NON : No print

SPEC 23 : Print title of task

Y : Allow
N : Inhibit

SPEC 24 : Print pre-print name

Y : Allow
N : Inhibit

SPEC 25 : Print quantity units

PCS : Pcs
M : m
CM : cm
NONE : No print

SPEC 26 : Print "/" for weight when weight is 0 value

Y : Allow
N : Inhibit

SPEC 27 : Width of receipt paper

66MM : 66mm
40MM : 40mm

SPEC 28 : Type of sum total receipt issued in multiple transactions

LONG : Long type
SHORT : Short type

SPEC 29 : Print the current time

Y : Allow
N : Prohibit

SPEC 30 : Print date

Y : Allow
N : Prohibit

SPEC 31 : Print using free format

Y : Allow
N : Prohibit

SPEC 32 : Number of free format used
(This activates only when SPEC 31 of PRINT SPEC is set to "Allow".)

NO.1 : No.1
NO.2 : No.2

SPEC 33 : Number of standard format used
(This activates only when SPEC 31 of PRINT SPEC is set to “Prohibit”.)

NO.1 : No.1
NO.2 : No.2
NO.3 : No.3
NO.4 : No.4
NO.5 : No.5
NO.6 : No.6
NO.7 : No.7

SPEC 34 : Label size of free format (in mm)
(This activates only when SPEC 31 of PRINT SPEC is set to “Allow”.)

64X40 : 64 x 40
64X55 : 64 x 55
64X77.5 : 64 x 77.5
64X92 : 64 x 92
64X120 : 64 x 120
40X23 : 40 x 23
40X28 : 40 x 28
40X46 : 40 x 46
64X62.5 : 64 x 62.5
40X77.5 : 40 x 77.5
40X92 : 40 x 92

SPEC 35 : Type of Bar-code used

CODE 39 : Code 39
UPC-A : UPC-A

SPEC 36 : Type of UPC bar-code (PLU)
(This activates only when SPEC 35 of PRINT SPEC is set to “UPC-A”)
PLU 13 : 13 digit
PLU 8 : 8 digit

SPEC 37 : Number system character (NS) of UPC bar-code
(This activates only when SPEC 35 of PRINT SPEC is set to “UPC-A”)
0 : 0
1 : 1
2 : 2
3 : 3
4 : 4
5 : 5
6 : 6
7 : 7
8 : 8
9 : 9

SPEC 38: Print all bar codes with headers (Code 39 only)

Y : Allow
N : Prohibit

SPEC 39 : PRINT QUANTITY HEADER

Y : Allow
N : Prohibit

PERIPHERAL SPECS

SCANNER PARAMETERS

SPEC 00 : Scanner connection

NOT : Not connected
CONNECT : Connected

SPEC 01 : Communication data bit length for scanner

7 : 7 bit
8 : 8 bit

SPEC 02 : Parity bit for scanner

NONE : None
ODD : Odd
EVEN : **Even**

SPEC 03 : Communication speed (baud rate) for scanner

1200	: 1200	**9600**	: 9600
2400	: 2400	**19200**	: 19200
4800	: 4800		

SPEC 04 : Stop bit length for scanner

1 : 1 bit
2 : 2 bit

SPEC 05 : Require CODE key press for confirmation after ID Code is scanned.

Y : Yes
N : No

SPEC 06 : Ignore spaces in bar-code (space data)

Y : Yes
N : No

FORCE BALANCE PARAMETERS

SPEC 00 : Data type from force balance (not used)

I.COUNT : Internal count
WEIGHT : weight

SPEC 01 : Communication data bit length for secondary RS-232

6 : 6 bit
7 : 7 bit
8 : 8 bit

SPEC 02 : Parity bit for secondary RS-232

NONE : None
ODD : Odd
EVEN : Even

SPEC 03 : Communication speed (baud rate) for secondary RS-232

2400 : 2400
4800 : 4800
9600 : 9600

SPEC 04 : Stop bit length for secondary RS-232

1 : 1 bit
2 : 2 bit

RS-232C PARAMETERS

SPEC 00 : Communication data bit length for RS-232C

7 : 7bit
8 : 8bit

SPEC 01 : Parity bit for RS-232C

NONE : None
ODD : Odd
EVEN : Even

SPEC 02 : Communication speed for RS-232C

4800 : 4800 BPS
2400 : 2400 BPS
9600 : 9600 BPS
1200 : 1200 BPS
19200 : 19200 BPS

SPEC 03 : Stop Bit for RS-232C

1 : 1
2 : 2

SPEC 04 : Timing of RS-232C output

NOT : No output
CA. : On calculation
[*] : On pressing enter key
C/* : On calculation and pressing enter key

SPEC 05 : RS-232C input

Y : Allow
N : Prohibit

SPEC 06 : RS-232C input field delimiter

CR : Carraige Feed
LF : Line Feed

SPEC 07 : DIGI-NET® Connection

Y : Yes
N : No

SPEC 08 : DIG ADDR® Connection

Y : Yes
N : No

MODEM PARAMETERS

SPEC 00 : MODEM Connection

NOT : Not connected
CONNECT : connected

SPEC 01 : Dial type of telephone circuit

PULSE : Pulse dial
TONE : Tone dial

MISC PARAMETERS

SPEC 00 : Read bar code header data.

Y : Allow
N : Prohibit

SPEC 01 : IBM Key board connection

NOT : Not connected
CONNECT : Connected

MISC SPECS

SPEC 00 : Set point function

ALL : Allowed for all item (Items with ID code and pre-programmed set points will take priority)
NONE : Prohibit
E-CODE : Allowed for items which have ID code.
N-CODE : Allowed for items which do not have ID code.

SPEC 01 : Type of set point value

RESULT % : Quantity and %
RES.MIN&MAX : Quantities of minimum value and maximum value
WEIGHT% : Weight value and %
WT..MIN&MAX : Minimum weight value and Maximum weight value
RECOMP.COU% : Quantity and % on re-computing

SPEC 02 : Hold last Lot no.

Y : Allow
N : Prohibit

SPEC 03 : Deduct items from inventory with non-add (counting) operation

RENEW : Allow
KEEP : Prohibit

SPEC 04 : Auto job operation no. for out (shipping) operation
(This activates only for items which do not have an auto job operation no. in ID code)
PAT1 : Pattern 1
PAT2 : Pattern 2
PAT3 : Pattern 3
PAT4 : Pattern 4
PAT5 : Pattern 5

SPEC 05 : Auto job operation no. for in (receiving) operation
(This activates only for items which do not have an auto job operation no. in ID code)
PAT1 : Pattern 1
PAT2 : Pattern 2
PAT3 : Pattern 3
PAT4 : Pattern 4
PAT5 : Pattern 5

SPEC 06 : Auto job operation no. for non-add (counting) operation
(This activates only for items which do not have an auto job operation no. in ID code)
PAT1 : Pattern 1
PAT2 : Pattern 2
PAT3 : Pattern 3
PAT4 : Pattern 4
PAT5 : Pattern 5

SPEC 07 : Power save function

Y : Allow
N : Prohibit

SPEC 08 : Entry to CHECK mode

Y : Allow
N : Prohibit

SPEC 09 : Entry to PROGRAM mode

Y : Allow
N : Prohibit

SPEC 10 : Entry to MAINTENANCE mode

Y : Allow
N : Prohibit

SPEC 11 : Request confirmation if operation will result in an inventory less than threshold level.

Y : Yes
N : No

SPEC 12 : Date format

D/M/Y : DD/MM/YY
M/D/Y : MM/DD/YY
Y/M/D : YY/MM/DD

SPEC 13 : Calling ID code in auto job operation

Y : Allow
N : Prohibit

Address 14 : Prohibition of non-programming part code in operation mode

Y : Allow
N : Prohibit

SPEC 15 : Memory size

385 : 385 items
1540 : 1540 items
3080 : 3080 items

DC-150 DATA SHEET

	DEALER DEMO - Y / N				Serial Number		
	END USER:				Sales Order No.		
	OPTIONS				Customer		
	SCANNER S/N:				Technician		
	PRINTER S/N:				Date		
	PRINT MOD.						
	CUSTOM FORMAT						
	FUNCTIONAL TEST	*STANDARD*	*SET*		*FUNCTIONAL TEST*	*STANDARD*	*SET*
1	KEYBOARD ENTRY			16	SET POINT ITEM		
2	DIGITAL TARE			17	SET POINT GEN.		
3	TARE			18	AUTO/JOB DEFAULT PAT 1	ABCDFKHJ	
4	INSUFFICIENT SAMPLE			19	LABEL FEED VALUE		
5	NEGATIVE COUNT			20	LABEL DETECTION		
6	RECOMPUTE			21	LABEL CONTRAST		
7	MEMORY STORAGE			22	APPEARANCE		
8	BATTERY ON			23	BAR CODE READER		
9	DATA TRANSFER			24	BAR CODE JUMPERS	SCANNER	PEN
10	DATE SETTING			25	RECEIPT SIZE, 66 /40	66	
11	SHELF (01-ZZ-ZZ-ZZ)			26	MEMORY FILLED		
12	RS-232 PORT			27	MEMORY CLEANED		
13	SOFTWARE VERSION			28	SPEC SWITCH SETTING	Off	
14	MEMORY SIZE			29	MAIN BOARD S/N T.H.A.	#	
15	LABEL SIZE			30	A/D NO. #	LOT NO #	
				31	RTH = ohm	VTH =	
	PLATFORM / SCALE 1	*APPLIED*	*DISPLA*				
	S/N	0			*Q.C. LIST - ✓*		
	Model	1/4			INSTRUCTION MANUAL		
	Capacity	1/2			SPIDER no . 1		
	Grads	3/4			PLATTER no . 1		
	Zero count	Full			SPIDER no . 2		
					PLATTER no . 2		
	PLATFORM / SCALE 2	*APPLIED*	*DISPLA*		LABEL CASSETTE ___		
	S/N	0			*LABELS*		
	Model	1/4			PAPER		
	Capacity	1/2			RS-232 CABLE		
	Grads	3/4			HEAD CLEANING PEN		
	Zero count	Full					
					CHECKED BY		
	PLATFORM / SCALE 3	*APPLIED*	*DISPLA*		PACKED BY		
	S/N	0					
	Model	1/4					
	Capacity	1/2					
	Grads	3/4					
	Zero count	Full					

NO	SPECIFICATION	CODE
	DISPLAY SPECS	
00	SUM TOTAL	AUTO , MAN.
	REPORT SPECS	
00	ITM/CONT.	ALL , SUM
01	ITM/PART #	NO , YES
02	ITM/PART NAM	NO , YES
03	ITM/UN..WT.	NO , YES
04	ITM/S.LOC.	NO , YES
05	ITM/INV.	NO , YES
06	ITM/THRSHLD	NO , YES
07	ITM/OUT,TDY	NO , YES
08	ITM/IN,TDY	NO , YES
09	ITM/TARE	NO , YES
10	ITM/SET PT.	NO , YES
11	ITM/SCALE	NO , YES
12	ITM/OUT ,AU#	NO , YES
13	ITM/IN ,AUT#	NO , YES
14	ITM/N.A.,AU#	NO , YES
15	I.O./CONT.	ALL , SUM
16	I.O./PART#	NO , YES
17	I.O./PRT NAM	NO , YES
18	I.O./UNT.WT	NO , YES
19	I.O./S.LOC.	NO , YES
20	I.O./INVTRY	NO , YES
21	I.O./TRSHLD	NO , YES
22	I.O./OUT,TDY	NO , YES
23	I.O./IN, TDY	NO , YES
24	I.O./TARE	NO , YES
25	I.O./SET PT.	NO , YES
26	I.O./SCALE	NO , YES
27	I.O./OUT, AU#	NO , YES
28	I.O./IN,AUTO#	NO , YES
29	I.O./N.A.,AU#	NO , YES
30	THR/CONT.	ALL , SUM
31	THR/PART#	NO , YES
32	THR/PRT NAM	NO , YES
33	THR/UNT.WT	NO , YES
34	THR/S.LOC.	NO , YES
35	THR/INVTRY	NO , YES
36	THR/TRSHLD	NO , YES
37	THR/OUT,TDY	NO , YES
38	THR/IN, TDY	NO , YES
39	THR/TARE	NO , YES
40	THR/SET PT.	NO , YES
41	THR/SCALE	NO , YES
42	THR/OUT, AU#	NO , YES
43	THR/IN,AUTO#	NO , YES
44	THR/N.A.,AU#	NO , YES

NO	SPECIFICATION	CODE
	MISC. SPECS.	
00	SET POINT	AL,NO,E-,N-
01	S.P. TYPE	Q ,W ,%,↑↓
02	HOLD LOT #	NO , YES

NO	SPECIFICATION	CODE
	PRINT SPECS	
00	BAR / ID CODE	NO , YES
01	ID CO/START	0-16L
02	ID CODE/ END	0-16L
03	H.R. ID CODE	NO , YES
04	BAR / PART #	NO , YES
05	PRT# / START	0-32L
06	PRT # /END	0-32L
07	H.R.PRT #	NO , YES
08	BAR / LOT #	NO , YES
09	LOT # / START	0-32L
10	LOT # / END	0-32L
11	H.R./ LOT #	NO , YES
12	BAR QTY RESL	NO , YES
13	H.R. / QTYRESL	NO , YES
14	BAR / UNT.WT.	NO , YES
15	H.R. / UNT.WT.	NO , YES
16	BAR / TARE	NO , YES
17	H.R. / TARE	NO , YES
18	BAR / GRS .WT.	NO , YES
19	H.R./GRS.WT.	NO , YES
20	BAR / NET WT.	NO , YES
21	H.R./NET WT.	NO , YES
22	OP.MODETASK	ALL , SUM
23	TASK TITLE	NO , YES
24	PRE PRINT	NO , YES
25	QTY.PCS.	PCS,M,CM,NO
26	PRT"/" AT 0	NO , YES
27	RCPT PAPER	40 MM, 66 MM
28	PRT TYPE	LONG,SHORT
29	TI(OP MODE)	NO , YES
30	DT(OPMODE)	NO , YES
31	FREE FORMAT	NO , YES
32	FREE FORMAT	FF #1 , FF# 2
33	S. FORMAT	S.F.#1,2,3,4,5,7
34	F.FRMT 64M	Mx 55 , 77 120
	40 ,92 / 40MMx	23,28,46,62,77,92
35	BAR TYPE	CODE39,UPCA
36	UPC PLU	13 , 8
37	UPC BARCODE	0 - 9
38	WRT HEADER	NO , YES
39	PRT QTY HEAD	NO , YES

NO	SPECIFICATION	CODE
31	A / D # 1	0 - 1 - 2 - 3
32	A / D # 2	0 - 1 - 2 - 3
33	A / D # 3	0 - 1 - 2 - 3
34	FORCE BAL.	0 - 1 - 2 - 3

NO	SPECIFICATION	CODE
	PERIPHERAL SPC.	
	SCANNER PARAMETERS	
00	SCANNER	CONN , NOT
01	SCN /DATA LGTH	7 , 8
02	SCN / PARITY	NON, ODD, EVEN
03	SCN /SPEED	12, 24, 48, 96, 192
04	SCN / STOP BIT	1 , 2
05	REF. ID CODE	NO , YES
06	BAR DEL. SPACE	NO , YES
	FORCE BALANCE PARAMETERS	
00	F. B. /DATA	ICOUNT , WEIGHT
01	F.B. /DATALGTH	6 , 7 , 8
02	F.B. / PARITY	NON, ODD, EVEN
03	F.B. / SPEED	24, 48, 96, 192
04	F.B. /STOP BIT	1 , 2
	RS-232 PARAMETES	
00	RS /DATA LGTH	7 , 8
01	RS / PARITY	NON, ODD, EVEN
02	RS / SPEED	12, 24, 48, 96, 192
03	RS / STOP BIT	1 , 2
04	RS OUT (PC IN)	NOT, CA, [*], C/*
05	RS IN (PC OUT)	NO , YES
06	RS IN END CODE	CR , LF
07	DIGI NET CONN	NO , YES
	MODEM PARAMETERS	
00	MODEM CONN.	CONN , NOT
01	DIAL TYPE	PULSE , TONE
	MISC. PARAMETERS	
00	READ HEAD DATA	NO , YES
01	KEYBOARD	CONN , NOT

CUSTOM LABELFORMAT							
NO	D	X	Y	S	M	H	A
20							
21							
22							

03	INV. UPDATE	RENEW, KEP		35	VIBRATION S1	NR,MN,MD,MX		23										
04	OUT / AU JOB	P1 -2 - 3 - 4 - 5		36	VIBRATION S2	NR,MN,MD,MX		24										
05	IN / AU JOB	P1 -2 - 3 - 4 - 5		37	VIBRATION S3	NR,MN,MD,MX		25										
06	N.A. / AU JOB	P1 -2 - 3 - 4 - 5						26										
07	POWER SAVE	YES , NO						27										
08	CHECK MODE	YES , NO						28										
09	PROG MODE	YES , NO						29										
10	MAINT. MODE	NO , YES						30										
11	WARN QTY.	NO , YES						31										
12	DATE ORDER	MDY,DMY,YMD						32										
13	CALLI.D. / A.J.	NO , YES						33										
14	NON PRO, I.D.	NO , YES		CUSTOMER VENDOR NAME				34										
15	MEM. ITEM	385, 1540, 3080						35										
								36										
W & M SPECS.		***REZERO,142***						37										
00	MIN DISPL. S1	1 - 2 - 5 - 10						38										
01	DEC. PT. S1	0 1 2 3 4 5		VENDOR NAME COORDINATES				39										
02	MIN.DISPL. S2	1 - 2 - 5 - 10			X	Y	S	M		40								
03	DEC.PT. S2	0 1 2 3 4 5		C - 1						41								
04	MIN. DISPL. S3	1 - 2 - 5 - 10		C - 2						42								
05	DEC.PT. S3	0 1 2 3 4 5		C - 3						43								
06	DISLP. RES.	25..,5000,10000								44								
07	WT. TYPE	LB , KG								45								
08	ZERO SIGN	GROSS , NET								46								
09	MANUAL STRT	NO , YES								47								
10	START RANGE	NO , ± 2%		CUSTOM LABEL FMT. PRT. ANGLE						48								
11	MINUS DISP.	MINUS , MAS		NO	D	X	Y	S	M	H	A		49					
12	MIN. MASK	GRASS , NET		1									50					
13	G.DISP.PROH.	NO , YES		2									51					
14	RENEW U.W.	YES , NO		3									52					
15	DISPL. ACCUR.	NO , YES		4									53					
16	CALL T. MEM.	NO , YES		5									54					
17	TRE RDU.PROH	YES , NO		6									55					
18	T. INC. PROH.	YES , NO		7									56					
19	T.ZERO REST.	YES , NO		8									57					
20	D.TARE PROH.	YES , NO		9									58					
21	PROCESS D.T.	ENT. DISPL		10									59					
22	TARE LIMIT	5 - 50 - 100 %		11									60					
23	AUTO RECOMP.	NO , YES		12									61					
24	RECOMP LITE	AFTR , BEFR		13									62					
25	MINUS WT.	NO , YES		14									63					
26	RECOMPUTING	NO , YES		15									64					
27	INSUF .PT. 0.	0,1,2,3,4,5,6,7 %		16									65					
28	KG / LB SIGN	YES , NO		17									66					
29	U.W. / CAL	NORM , FAST		18									67					
30	T.ZRO.TRP.	YES , NO		19														

4. MEMORY DELETE - CAUTION

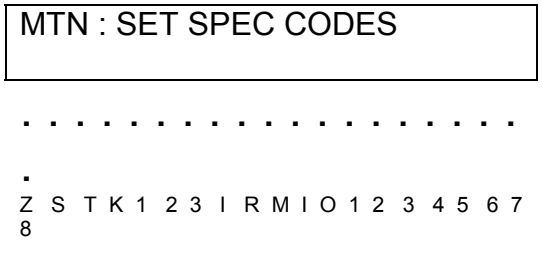
You can select all or a parts of memory file to delete from the following table.

INDEX		MEMORY FILES TO DELETE
ALL MEMORY FILE		ITEM & FORMAT FILES
ITEM MEMORY FILE	PART NO.	Part no. data of all part items
	PART NAME	Part name data of all part items
	UNIT WEIGHT	Unit weight of all part items
	SHELF LOCATION NO.	Shelf location no. of all part items
	INVENTORY	Inventory data of all part items
	THRESHOLD	Threshold data of all part items
	DAILY OUT-COUNT	Today's shipping record of all items
	DAILY IN-COUNT	Today's receiving record of all items
	VALUE	Tare values of all part items
	SET POINT VALUE	Set point values of all part items
	SELECTED SCALE NO.	Selected scale no. of all part items
	AUTO JOB NO. FOR SHIPPING OPERATION	Auto job no for shipping operation of all part items
	AUTO JOB NO. FOR RECEIVING OPERATION	Auto job no. for receiving operation of all part items
	AUTO JOB NO. FOR COUNTING OPERATION	Auto job no. for counting operation of all part items
PRINT FORMAT FILE	PRINT FORMAT	Free format, pre-print, S. location label , Title contents
	SEQ NO.	SEQ NO.

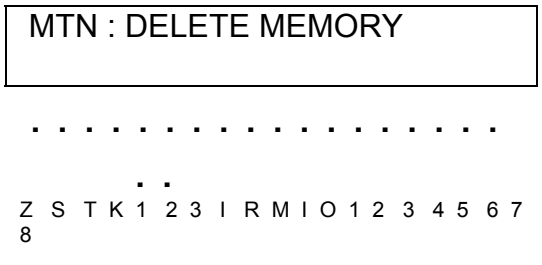
- CAUTION -

Programming operation

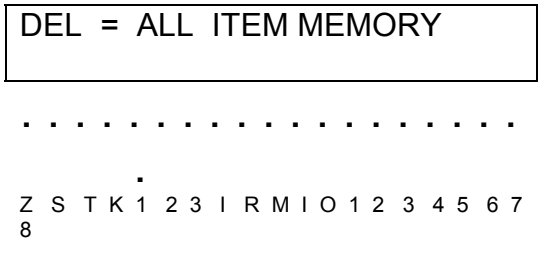
1. Enter Maintenance mode.



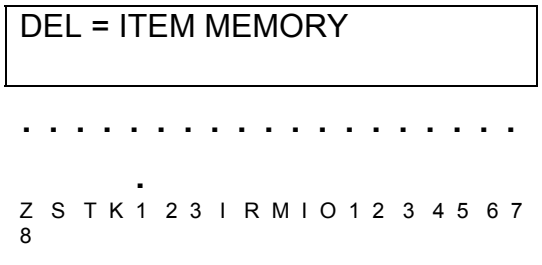
2. Select memory delete with **[TARE ←]** or **[UNIT WEIGHT→]** keys.



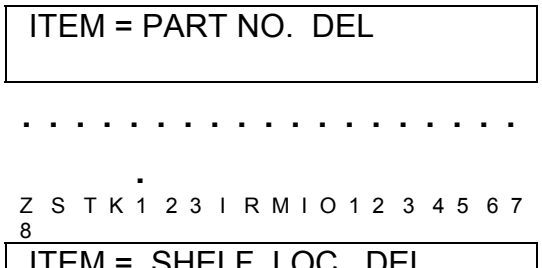
3. Press **[∗/ENTER]** key.



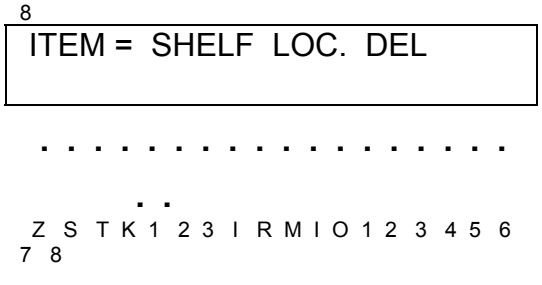
4. Select memory file to delete with **[TARE ←]** or **[UNIT WEIGHT→]** key
EX = Item memory file



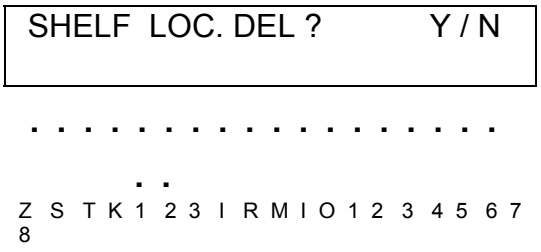
5. Press **[∗/ENTER]** key.



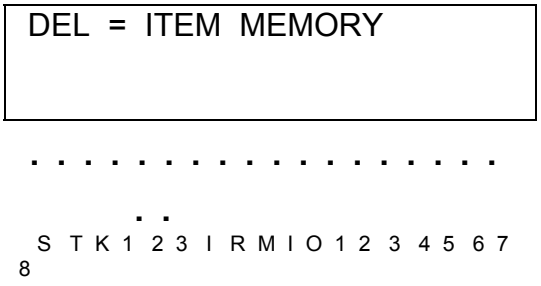
6. Select item data to delete with **[TARE←]** or **[UNIT WEIGHT→]** key.



7. Select item data to delete with **[TARE ←]** or **[UNIT WEIGHT→]** key.



8. Press **[Y]** key to execute the deletion of data.
(* **[N]** key works for escaping the deletion screen.)



Note) You can delete the other memory data with the same operation as the above.

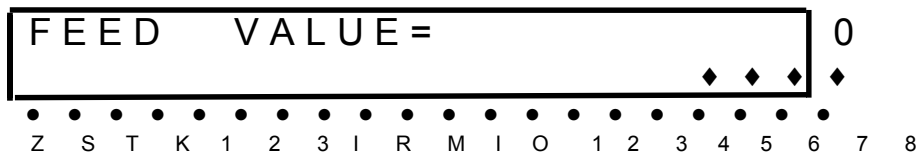
5. PRINT ADJUSTMENT

You can adjust the performance of printer block. You can adjust the performance of printer with FEED VALUE, LEVEL OF DETECTION, and PRINT CONTRAST.

6. FEED VALUE

"Feed Value" is the feed value after printing the former label.

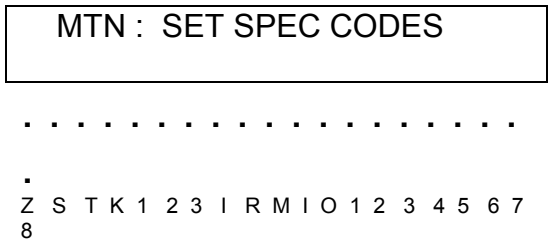
Feed value is to be set at 0 value, if the correct label size are set with the correct print format. However, if you are unable to get the correct position, you can adjust the feed length by adjusting FEED VALUE.



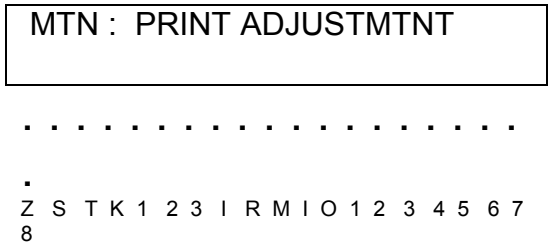
Key functions **[+]** key is used for the increment of the feed value. (Max. = +127)
[–] key is used for the decrement of the feed value. (Min. = -127)
[→]*(feed)* key is used for feeding label to check the proper feed value.

Programming operation

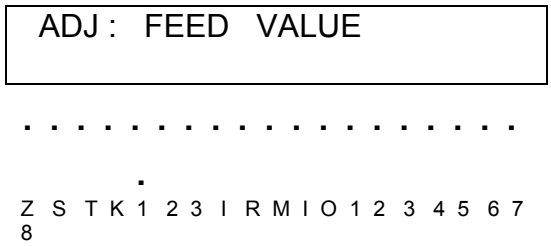
1. Enter Maintenance mode.



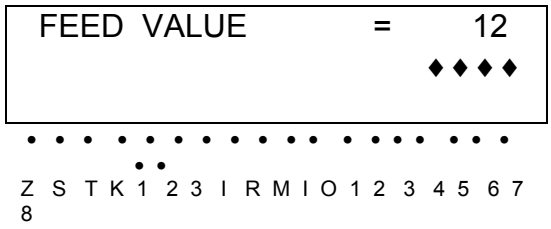
2. Select Print Adjustment with **[TARE←]** or **[UNIT WEIGHT→.]** keys.



3. Press **[∗/ENTER]** key.



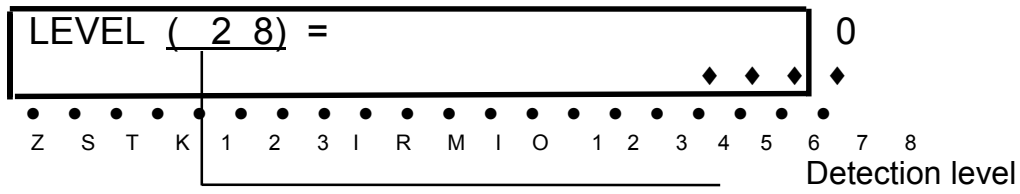
4. Press **[∗/ENTER]** key then adjust feed value with
[+] and **[–]** keys.
Ex) feed value = +12



5. Press **[AUTO/MANUAL]** key to escape the programming screen.

7. DETECTION LEVEL

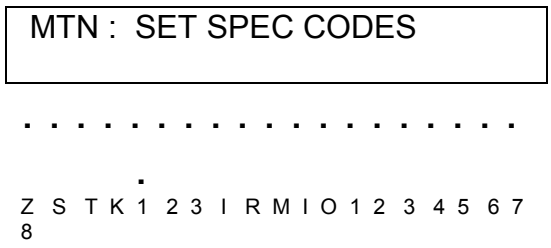
"Detection Level" is the performance of the sensor for paper quality of label roll. Detection level is to be adjusted automatically on feeding out labels. However, when you use special label such as mirror-coated thermal label or color label, the sensor cannot detect the gaps between labels correctly in some case. After setting certain value, press feed key to check the detection level is correct.



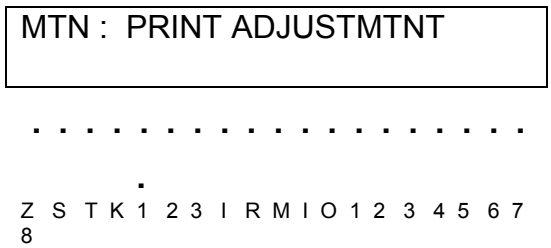
Key functions **[+]** key is used for the increment of the feed value. (Max. = +127)
[–] key is used for the decrement of the feed value. (Min. = -127)
[→] *(feed)*key is used for feeding label to check the proper detection level.

Programming operation

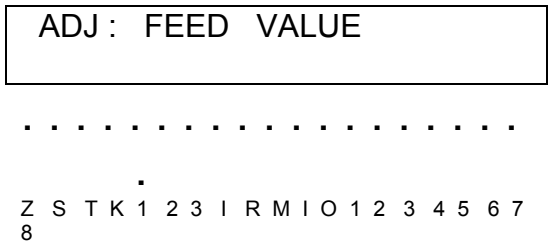
1. Enter Maintenance mode.



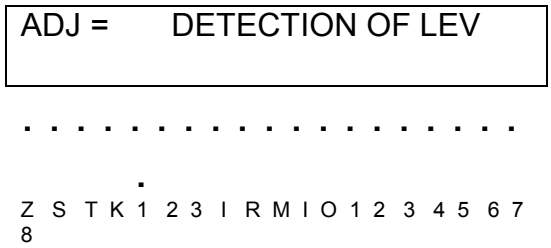
2. Select Print Adjustment with **[TARE ←]** or **[UNIT WEIGHT→]** key.



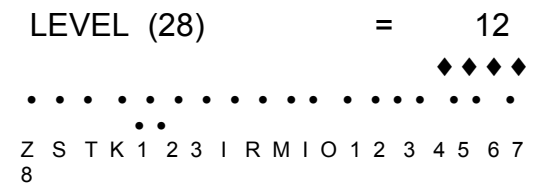
3. Press **[∗/ENTER]** key.



4. Select item to adjust with **[TARE←]** or [**UNIT WEIGHT→]**Key.



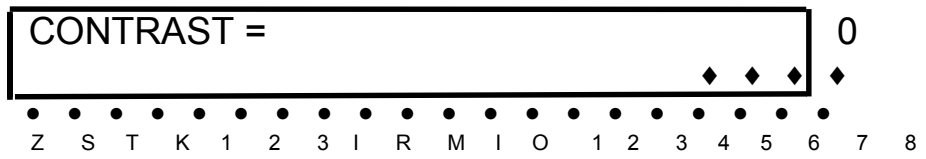
5. Press **[∗/ENTER]** key then adjust detection level with **[+]** and **[–]** keys.
Ex) Detection level = +12



6. Press **[AUTO/MANUAL]** key to escape the programming screen.

8. PRINT CONTRAST

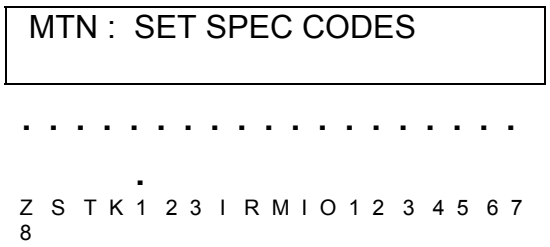
"Print Contrast" is the resistance value of the thermal head. If the resistance is too low or high for printing adjustment is made here. Excess voltage can damage the thermal head. See service manual.



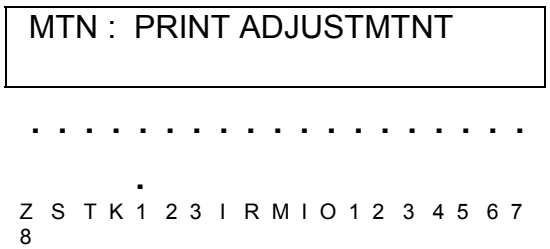
Key functions **[+]** key is used for the increment of the feed value. (Max. = +127)
[–] key is used for the decrement of the feed value. (Min. = -127)

Programming operation

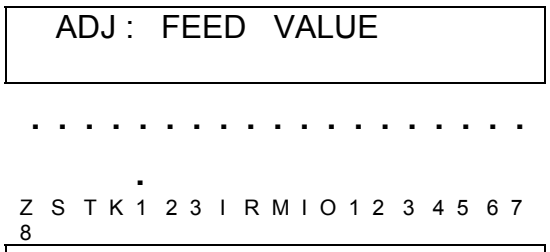
1. Enter Maintenance mode.



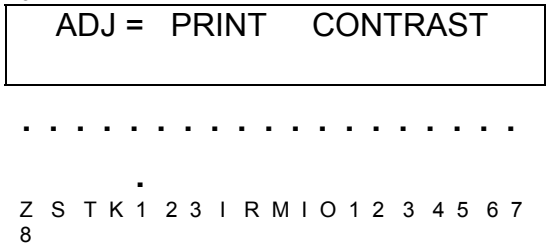
2. Select Print Adjustment with **[TARE ←]** or **[UNIT WEIGHT→]** key.



3. Press **[∗/ENTER]** key.

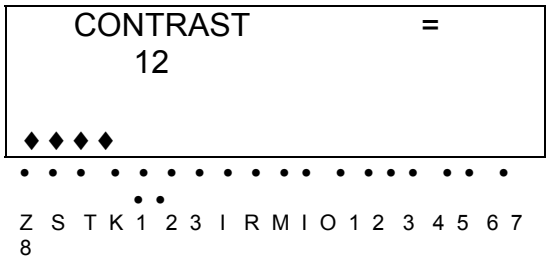


4. Select item to adjust with **[TARE←]** or **[UNIT WEIGHT→]**keys.



5. Press **[∗/ENTER]** key then adjust print contrast with **[+]** and **[–]** keys.

Ex) print contrast = +12



5. Press **[AUTO/MANUAL]** key to escape the programming screen.

AUTO JOB PROGRAMMING

Auto Job Operation allows the user to select a pattern of operation that uses only the [ENTER] key to advance to the next step. The establishment of a standardized routine is organized in 5 different patterns. Each ID code can be assigned to a pattern to match a users receiving, shipping, or counting proceedure.

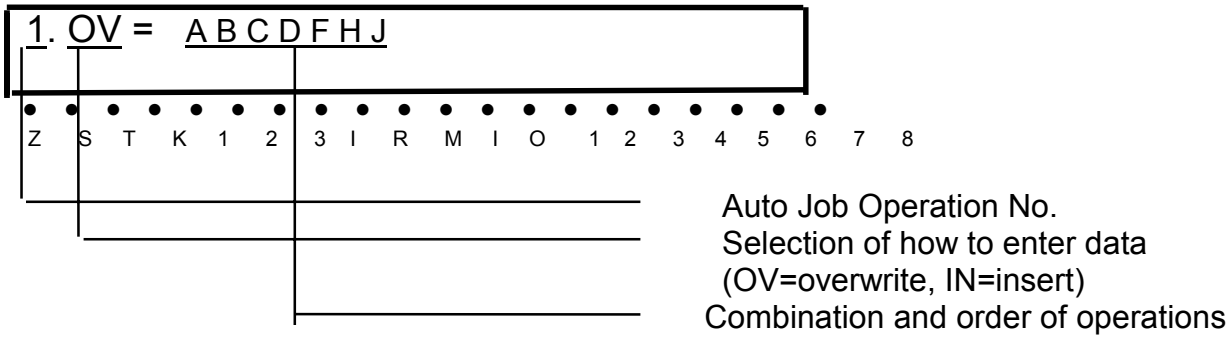
You can change the default setting in the following table for your standardized routine.

9. PROGRAMMABLE PROCESS IN AUTO JOB OPERATION

OP. #	OPERATIONS ENTER ID CODE	KEY ACTION	DEFAULT SETTING				
			#1	#2	#3	#4	#5
A	Lot. No. entry	key or scanner entry then press **[∗/ENTER]** key	○	○			○
B	Parts No. entry (temporary)	key or scanner entry then press **[∗/ENTER]** key	○	○			○
C	Tare Weight entry	key or one touch tare or scanner entry then **[∗/ENTER]**	○	○	○	○	
D	Sample Quantity entry	put 10 pieces on platter then press **[∗/ENTER]** key *	○				
E	Unit Weight entry manually	key or scanner entry then press **[∗/ENTER]** key			○		
F	Place parts on scale	Place parts on scale then press **[∗/ENTER]** key NOTE[5]	○		○		
G	Enter Manual count	Manually enter quantity then press **[∗/ENTER]** key NOTE[4]		○		○	○
H	Print Label	press **[∗/ENTER]** key to print label and renew the memory	○	○	○	○	○
I	Cancellation of Auto Job Operation	press **[∗/ENTER]** key to be back to normal operation					
J	End of Operation	press [**∗/ENTER]** key to end the operation	○	○	○	○	○
K	Part Name entry	key or scanner entry then press **[∗/ENTER]** key					

Note 1) Operations are indicated with letters in the left of the programming display. Enter the sequence of operation in the way you want them performed. ie. Default auto job operation # 1 is ABCDFHJ
Note 2) The last step of each operations should be “I” or “J”
Note 3) If you do not assign Auto Job Operation no. for ID code, Auto Job Operation is to be applied from Address 04, 05 06 in MISC. SPEC. Page 84.
Note 4) G - used to manually enter and print a label with NO calculation / NO weight printed - Quantity ONLY.
Note 5) F - Place Parts on scale.
* or place a different number of pieces on the scale, key in that number, then press **[∗/ENTER]** key

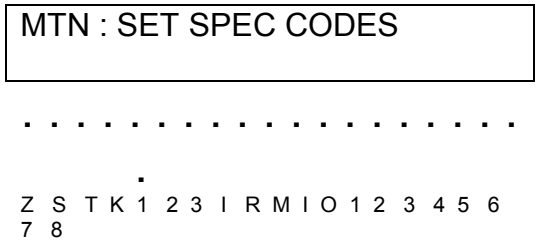
PROGRAMMING SCREEN


1. OV = A B C D F H J
Z S T K 1 2 3 I R M I O 1 2 3 4 5 6 7 8
Auto Job Operation No.
Selection of how to enter data
(OV=overwrite, IN=insert)
Combination and order of operations

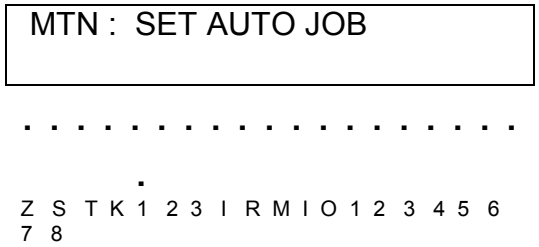
Key functions **[+]** and **[–]** key are used for change the method of data entry. (OV / IN)
[TARE ←] and **[UNIT WEIGHT→]** keys are sued for moving cursor

10. PROGRAMMING OPERATION

1. Enter Maintenance mode.

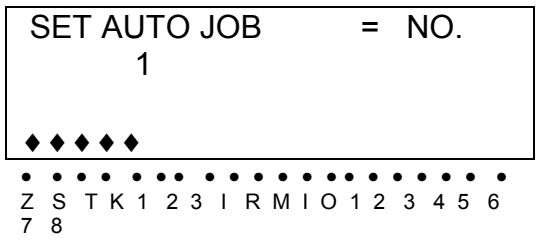


2. Select Auto Job Set with **[TARE ←]** or **[UNIT WEIGHT →]** key.

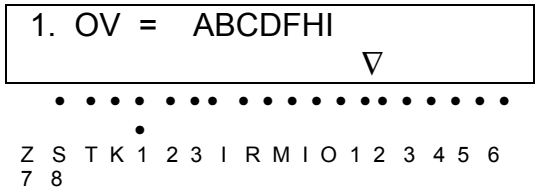


3. Press **[∗/ENTER]** key then select auto job operationno. with **[+]** or **[–]** key.

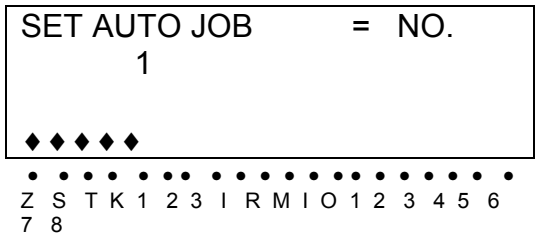
Ex) Auto Job operation no. = 1



4. Press **[∗/ENTER]** key then change the process data.
Ex) Operation procedure = ABCDFHI



5. Press **[∗/ENTER]** key to store the data into memory.



♦ = Blinking Cursor

11. DATA TRANSFER

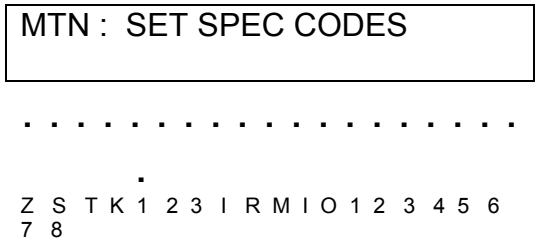
. DC-150 can load / save/ verify the following data file with P/C.

- Method Program (SPEC) data
- Print Format data
- Address Contents data
- Auto Job Operation data
- All data of part item

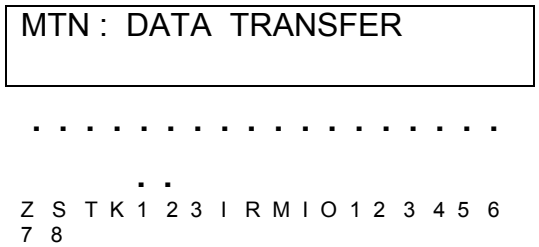
Operation procedure

1. After connecting with DATA BASE, turn on the main switch.

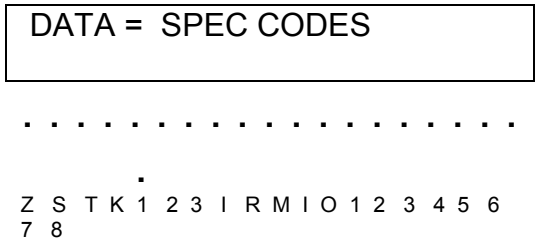
2. Enter Maintenance mode.



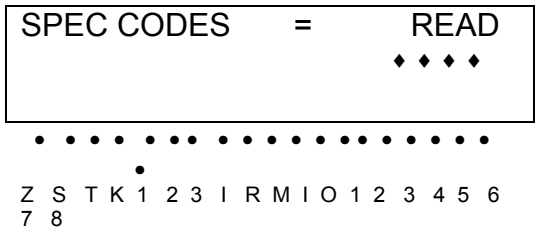
3. Select DATA with **[TARE ←]** or **[UNIT WEIGHT→]** key



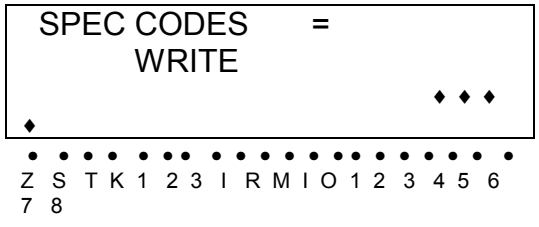
4. Press **[∗/ENTER]** key.



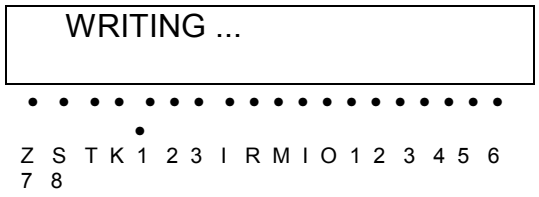
5. Select the data to send with **[TARE ←]** or **[UNIT WEIGHT→]**keys, then press **[∗/ENTER]** key.



6. Select load/save/verify with **[TARE←]** or **[UNIT WEIGHT→]** keys.



7. Press **[∗/ENTER]** key to start the data transfer.



DC-150 BACK-UP

DATA TRANSFER PROGRAM PROVIDED BY MANUFACTURER

TO INSTALL PROGRAM:

1. Switch to A: or B: drive
2. Type INSTALL
   The program will make a directory under the C: drive called DC150BAK with it's own sub-directory called FILES.
3. Baud rate default ,4800 Baid

TO USE THE PROGRAM:

1. At the C:\ prompt, change directory to DC150BAK
2. Type DC150BAK
3. Enter the serial port you will use to connect to the DC-150.
   (The 9 pin port on most computers is usually number 1).
4. Enter the direction of transfer.
   F is for taking data (F)rom the scale to the computer
   T is for taking data from the computer (T)o the scale.
5. Enter the filename to be transferred.
   Any 8 characters DOS compliant filename will do, followed by 3 character extension.
   It is recommended that the following naming procedure be used:

   XXXXXXXX.SPC - for specification data
   XXXXXXXX.FMT - for format data
   XXXXXXXX.JOB - for auto job file data
   XXXXXXXX.ITM - for inventory data
   XXXXXXXX.ADD - for address label data

When transferring a file from the computer to the scale, data in the scale will not be lost.

New data for an ID code already in memory in the scale will be overwritten by the data coming from the computer.

TO SET THE SCALE FOR DATA TRANSFER:

1. Press the MODE key to get to the MAINTENANCE MODE.
2. Press the ENTER key and then the RIGHT ARROW key ***four*** times until the display reads: DATA TRANSFER.
3. Press the ENTER and, using the RIGHT ARROW and LEFT ARROW keys, select the type of data you wish to transfer.
4. Press the ENTER key and then use the ***+ or - keys*** to select READ or WRITE.
   Select READ to send data from the computer into the scale.
   Select WRITE to send data from the scale to the computer.
5. Press ENTER and the scale will display the operation in progress.
6. Press AUTO/MANUAL to return to previous screen.

UPDATE FOR VERSION D2.00

Choice of Baud Rate for Data Transfer.

Requires: DC-150 BAK2.Exe (selection 4800, 9600, 19200)

Note: Changing baud rate requires spec change in DC-150 RS-23 parameters
loading specs with data transfer will set parameters to 4800 Baud.

To set baud rate:

On PC:

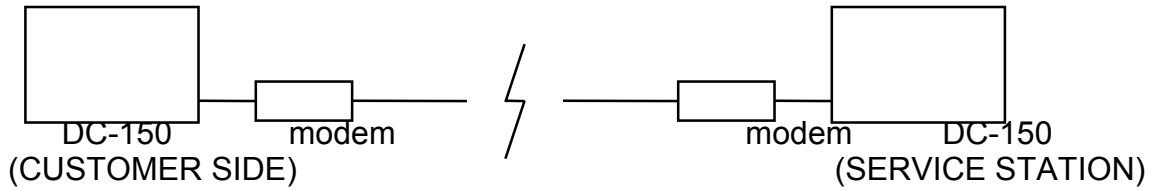
Run DC150BAK.EXE program
Select Port to use
Select Baud Rate to use (by number)
Select direction of transfer
Type file name
Press ENTER key

On Scale

Go to Maintenance Mode
Press ENTER key twice
Press UNIT WEIGHT key three times (display = peripheral specs)
Press ENTER
Press UNIT WEIGHT key twice (display = RS-232 parameters)
Press ENTER
Press + key twice (display =RS/C speed)
Press UNIT WEIGHT key
Select baud rate with + key
Press ENTER key
Press MODE key until display reads Maintenance Mode
Press ENTER key
Select Data Transfer by pressing
Press UNIT WEIGHT key 4 times (display = MTN Data Transfer)
Press ENTER key
Select FILE with UNIT WEIGHT key
Press ENTER key
Select READ or WRITE and press ENTER key

MODEM COMMUNICATION

DC-150 can load / save the following data between two machines through modem communication. If you need to change the data of DC-150 in the long distance from your service station, you can send the data through modem communication.

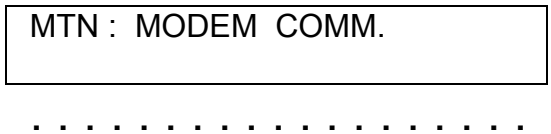


Available data for transfer

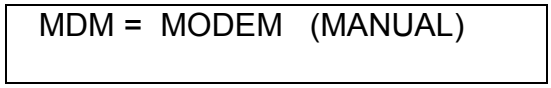
- SPEC data
- Print Format data
- Auto Job Operation data
- All data of part item

12. PROGRAMMING OPERATION AT AUTO SIDE

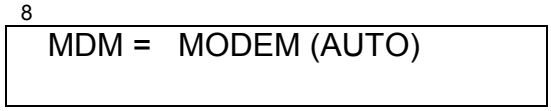
1. Enter Maintenance mode and select MODEM with **[TARE←]** or **[UNIT WEIGHT→]** keys



2. Press **[∗/ENTER]** key.



3. Select Auto with **[TARE ←]** or **[UNIT WEIGHT→]** keys

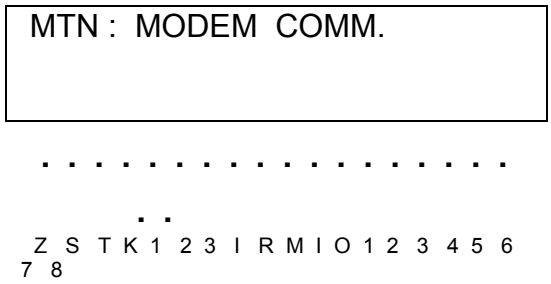


4. Press **[∗/ENTER]** key then watch and wait for data transfer.

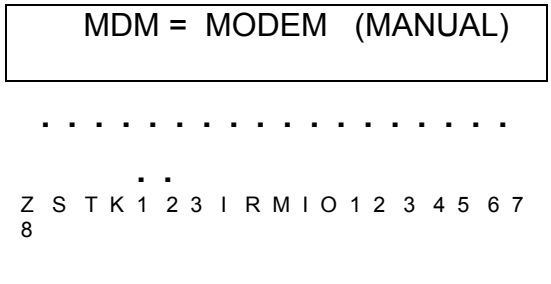
NOTE) On the completion of data transfer, press **[∗/ENTER]** key to be back to the initial screen of modem communication.

13. MANUAL PROGRAMMING OPERATION

1. Enter Maintenance mode and select MODEM with
[TARE←] or **[UNIT WEIGHT→]** keys

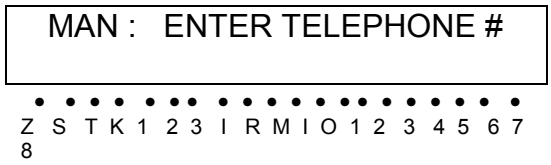


2. Press **[∗/ENTER]** key

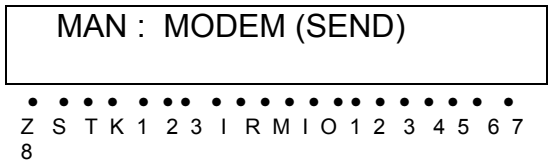


3. Press **[∗/ENTER]** key.

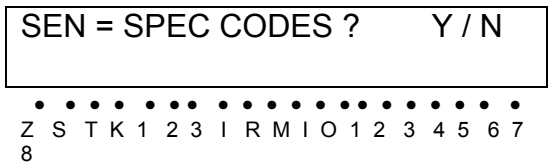
* **[R]** key is used for re-dial



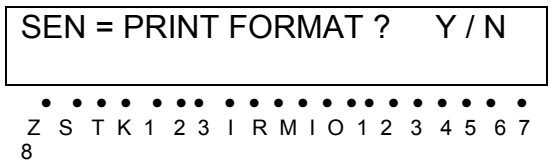
4. Enter telephone number then press **[∗/ENTER]** key.



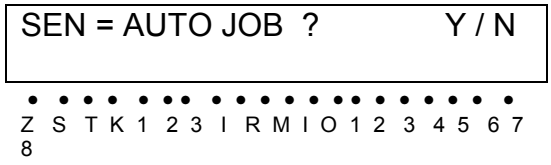
5. Select Receive/ Send / End with **[TARE←]** or **[UNIT WEIGHT→]** then press **[∗/ENTER]** key
Ex) send



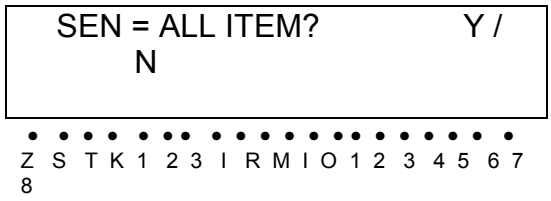
6. Select if you send SPEC data with **[Y]** = yes or **[N]** = No



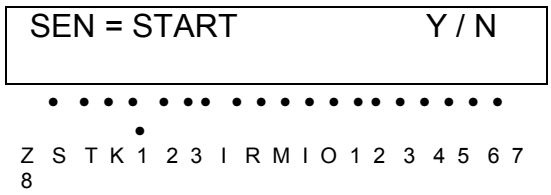
7. Select if you send PRINT FORMAT data with **[Y]**= Yes, **[N]** = No



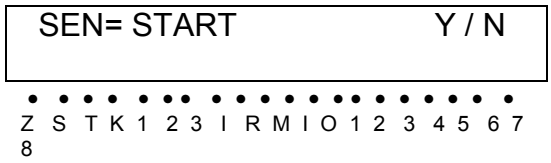
8. Select if you send Auto Job data with **[Y]**= Yes, **[N]** =No.



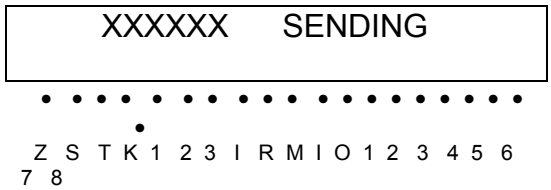
9. Select if you send item data with **[Y]**= Yes, **[N]** =No.



10. Set if you send item data with [Y]= Yes,.



11. Press [Y] key to start the data transfer.



NOTE) The existing data on addressee side will be overwritten . Before you transfer item data, check if memory capacity is sufficient to accept new input data.

NOTE) In short hold screen, key operation is not available. After the short hold screen, the display changes to the next screen automatically.

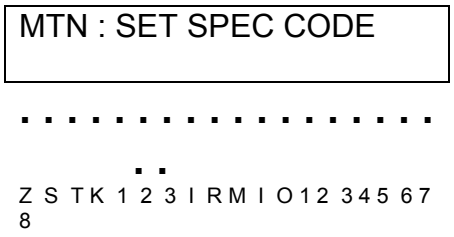
NOTE) To escape from modem communication screen, press [MODE] or [AUTO/MANUAL] key.

14. PRINTING SPEC LIST

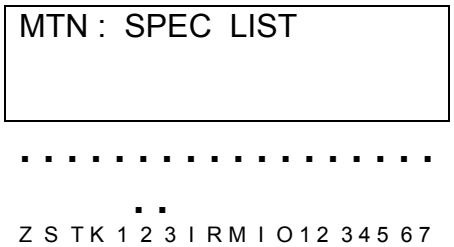
You can print the list of programmed SPECS on receipt paper.
The procedure to print the list is as shown below.

Procedure

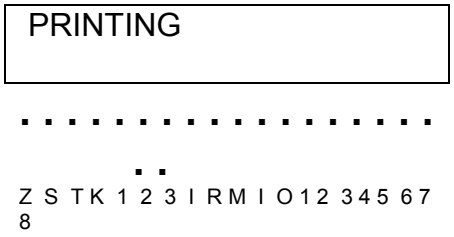
1. Enter Maintenance mode.



2. Select SPEC LIST with **[TARE←]** or **[UNIT WEIGHT→]** keys.



3. Press **[∗/ENTER]** key to print the list



Note) Load receipt paper in the label cassette

```
DC-150
-- SPEC LIST --
06-03-96 12:10                MACHINE NO. 01

DISPLAY SPECS
  00:SUM TOTAL =  AUTO

REPORT SPECS
  00:ITM/CONTENT=  ALL
  01:ITM/PART NO.   =N
  02:ITM/PART NAME  =N
  03:ITM/UNIT WEIGHT=N
  04:ITM/SHELF LOC. =N
  05:ITM/INVENTORY  =N
  06:ITM/THRESHOLD  =N
  07:ITM/OUT.(TODAY)=N
  08:ITM/IN.(TODAY) =N
  09:ITM/TARE       =N
  10:ITM/SET POINT  =N
  11:ITM/SCALE      =N
  12:ITM/OUT.AUTO NO=N
  13:ITM/IN.AUTO NO.=N
  14:ITM/N.A.AUTO NO=N
  15:I&O/CONTENT=  ALL
  16:I&O/PART NO.   =N
  17:I&O/PART NAME  =N
  18:I&O/UNIT WEIGHT=N
  19:I&O/SHELF LOC. =N
  20:I&O/INVENTORY  =N
  21:I&O/THRESHOLD  =N
  22:I&O/OUT.(TODAY)=N
  23:I&O/IN.(TODAY) =N
  24:I&O/TARE       =N
  25:I&O/SET POINT  =N
  26:I&O/SCALE      =N
  27:I&O/OUT.AUTO NO=N
  28:I&O/IN.AUTO NO.=N
  29:I&O/N.A.AUTO NO=N
  30:THR/CONTENT=  ALL
  31:THR/PART NO.   =N
  32:THR/PART NAME  =N
  33:THR/UNIT WEIGHT=N
  34:THR/SHELF LOC. =N
  35:THR/INVENTORY  =N
  36:THR/THRESHOLD  =N
  37:THR/OUT.(TODAY)=N
  38:THR/IN.(TODAY) =N
  39:THR/TARE       =N
  40:THR/SET POINT  =N
  41:THR/SCALE      =N
  42:THR/OUT.AUTO NO=N
  43:THR/IN.AUTO NO.=N
  44:THR/N.A.AUTO NO=N
```

PRINT SPECS

00:BAR/ID CODE =Y
01:ID CD./START= 1L.
02:ID CODE/END =16L.
03:H.R/ID CODE =N
04:BAR/PART NO. =N
05:P.NO./START = 0L.
06:P.NO./END = 0L.
07:H.R/PART NO. =N
08:BAR/LOT NO. =Y
09:LOT NO/START= 1L.
10:LOT NO./END =10L.
11:H.R/LOT NO. =N
12:BAR/QTY RESULT =Y
13:H.R/QTY RESULT =N
14:BAR/UNIT WEIGHT=Y
15:H.R/UNIT WEIGHT=N
16:BAR/TARE =N
17:H.R/TARE =N
18:BAR/GROSS W. =N
19:H.R/GROSS W. =N
20:BAR/NET WEIGHT =N
21:H.R/NET WEIGHT =N
22:OP.MODE TASK= ALL
23:TASK TITLE =Y
24:PRE PRINTED =Y
25:QTY PCS = PCS
26:PRINT "/" AT 0 =Y
27:RECEIPT SIZE=66MM
28:PRINT TYPE = LONG
29:TIME(OP.MODE) =Y
30:DATE(OP.MODE) =Y
31:FREE FORMAT =Y
32:FREE FORMAT =NO.2
33:S.FORMAT =NO.6
34:F.FORMAT = 64X120
35:BAR. TYPE =CODE39
36:UPC PLU TYPE =13
37:UPC BARCODE NS =0
38:WRITE HEAD DATA=Y

SCANNER PARAMETERS

00:SCANNER =CONNECT
03:SCN/DATA LENGTH=7
04:SCN/PARITY =EVEN
05:SCN/C.SPEED= 4800
06:SCN/STOP BIT =1
07:REF.ID CODE =N
08:BAR DEL.SPACE =N

F.BALANCE PARAMETERS

00:FB/DATA =I.COUNT
01:FB/DATA LENGTH =7
02:FB/PARITY =EVEN
03:FB/C.SPEED =4800
04:FB/STOP BIT =1

RS232C PARAMETERS

00:RS/DATA LENGTH =7
01:RS/PARITY =EVEN
02:RS/C.SPEED = 4800
03:RS232C/STOP BIT=1
04:RS OUT(PC IN)=NOT
05:RS IN(PC OUT) =Y
06:RS IN END CODE=LF
07:DIGI NET CONN.= N

MODEM PARAMETERS

00:MODEM = NOT
01:DIAL TYPE =PULSE

MISC PARAMETERS

00:READ HEAD DATA =Y
01:KEY BOARD= NOT

MISC SPECS

00:SET POINT = ALL
01:SET P= RESULT%
02:KEEP LOT NO. =N
03:N.A MEMORY = KEEP
04:OUT/AUTO JOB=PAT1
05:IN /AUTO JOB=PAT1
06:N.A/AUTO JOB=PAT1
07:POWER SAVE =Y
08:CHECK MODE =Y
09:PROGRAM MODE =Y
10:MAINTE.MODE =Y
11:WARN QTY RESULT=N
12:DATE ORDER =M/D/Y
13:CALL CODE/AUTO =N
14:NON-PRG.PAR.CO.=N
15:ITEM MEMORY = 385

W&M SPECS

00:MIN.DISPLAY S1= 1
01:DECIMAL P. S1=4L.
02:MIN.DISPLAY S2= 2
03:DECIMAL P. S2=3L.
04:MIN.DISPLAY S3= 2
05:DECIMAL P. S3= NO
06:D.RESOLUT=1/10000
07:WEIGHT TYPE =LB
08:ZERO SIGN =GROSS
09:MANUAL START =N
10:START RANGE= NO
11:MINUS DISP.=MINUS
12:MIN.MASK RAN.=GRO
13:G.DISP PROHIBIT=N
14:RENEW UW.MEMORY=Y
15:DISP. ACCURACY =Y
16:CALL T.MEMORY =Y
17:TARE REDUCE PR.=N
18:T.LOAD ADD PRO.=N
19:T.ZERO RST PRO.=N
20:D.TARE PROHIBIT=N
21:PROCESS D.T.=ENT.
22:TARE LIMIT =100%
23:AUTO RECOMP. =N
24:RECOMP.SIGN=BEFOR
25:MINUS WEIGHT =Y
26:RECOMPUTING =Y
27:INSUFF POINT=0.1%
28:KG/LB SIGN =N
29:UW.CALCULATE=FAST
30:T.ZERO TRA. PR =N
31:A/D NO.1 =SCALE1
32:A/D NO.2 =SCALE2
33:A/D NO.3 =NOT US
34:F.BALANCE =NOT US
35:VIBRATION S1=NORM
36:VIBRATION S2=NORM
37:VIBRATION S3=NORM

4. CHECK MODE

Printing Various Reports From Memory Files.

4-1. MEMORY FILES

4-2. INVENTORY REPORTS

4-3. SHELF LOCATION LABEL

4-4. MEMORY FILE OUTPUT TO PC

SECTION 4 CHECK MODE TABLE OF CONTENTS **PAGE**

4.1 MEMORY FILES **126**

4.1.1. OPERATION TO PRINT ALL ITEMS REPORT 127

4.1.2. OPERATION TO PRINT ONE ITEMS REPORT 127-128

4.31.3. OPERATION TO PRINT GROUP ITEM REPORT 128

4.2 MOVEMENT & THRESHOLD REPORT **129**

4.2.1. OPERATON TO PRINT TODAY'S MOVEMENT REPORT 129

4.2.2. OPERATON TO PRINT THRESHOLD REPORT 130

4.3 SHELF LOCATION LABEL PRINT **131**

4.4 MEMORY FILE OUTPUT TO PC **132**

15. MEMORY FILES

To check programmed ID CODE data, you can print that data in lists on receipt paper.

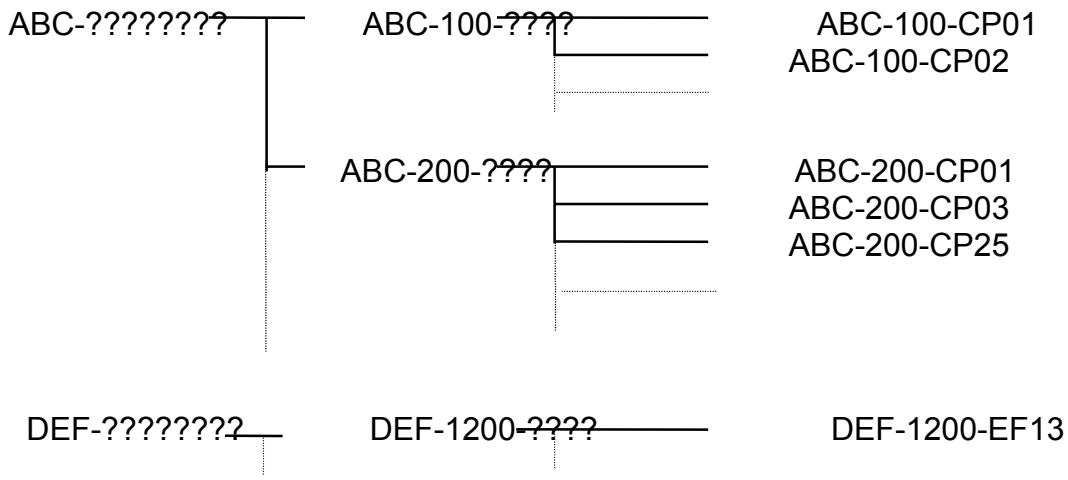
The following reports can be selected from memory data when needed to check information.

ALL ITEMS	..... All ID Codes with data that has been programmed for each.
ONE ITEM	..... One ID Code with data that has been programed for it.
ONE GROUP ITEM	..... One group of ID Codes with items data.

GROUP CATEGORY

By entering a common prefix for the group, you can select the group to print. By entering " ? " question mark with [SPACE] key, you select the number of digits of the group to print as in the following.

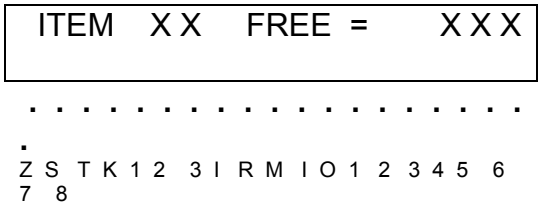
Ie. The relationship of ID codes in a group report.



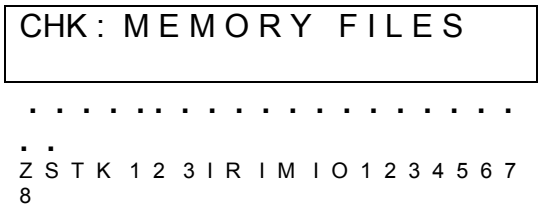
16. OPERATION TO PRINT ALL ITEM REPORT

1. Enter Check mode.

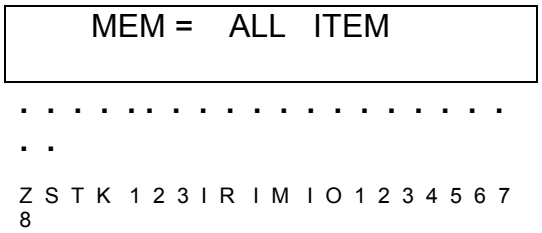
[OPENING SCREEN SHOWS AVAILABLE MEMORY SPACE
STANDARD 385 ITEMS TO 3050 EXPANDED MEMORY]



2. Press **[∗/ENTER]** key.



3. Press **[∗/ENTER]** key to print item report.

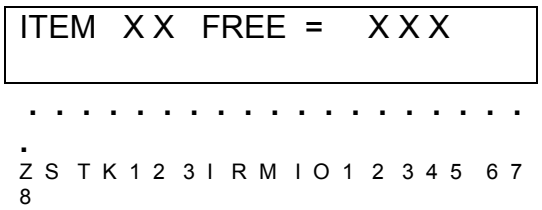


Note 1) **[→]** Key is used to stop printing reports

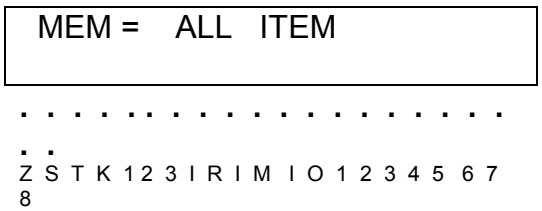
Note 2) APPENDIX III shows the sample of all item report.

17. OPERATION TO PRINT ONE ITEM REPORT

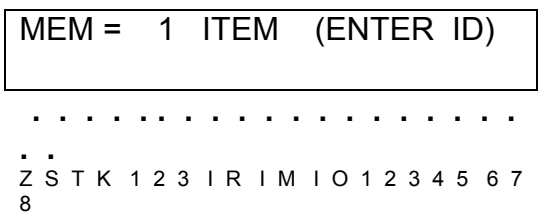
1. Enter Check mode.



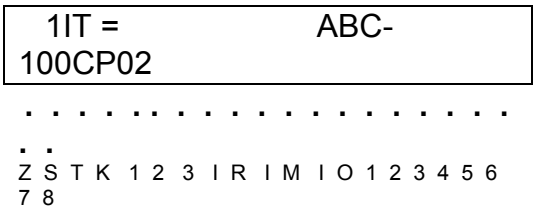
2. Press **[∗/ENTER]** key.



3. Select one item report with **[TARE←]** or. **[UNIT WEIGHT→]** key

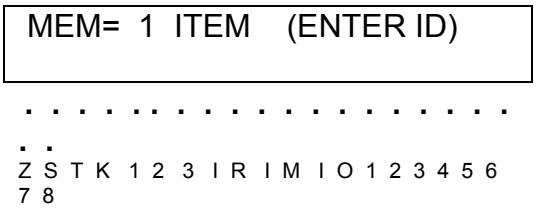


4. Enter ID code of part item to print then Press **[∗/ENTER]** key.
ie. ABC-100CP02



5. Last Screen awaits another ID Code

Press **[AUTO/MANUAL]** to escape



Note 1) Switch to receipt paper to print data.

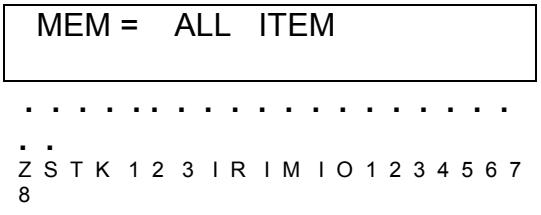
Note 2) **[→]** Key is used to stop printing reports**.**

Note 3) APPENDIX III shows the sample of one item report.

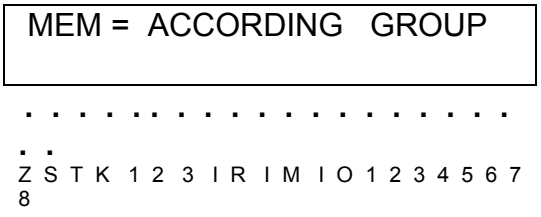
18. *OPERATION TO PRINT GROUP ITEM REPORT*

1. Enter Check mode

2. Press **[∗/ENTER]** key.

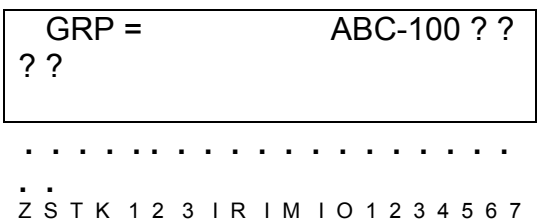


3. Select group report with **[TARE←]** or **[UNIT WEIGHT→]** key



4. Enter GROUP CODE of items to print then Press **[∗/ENTER]** key.

ie. ABC-100????



Note 1) Press **[AUTO/MANUAL]** to escape and return to previous screen.
Note 2) You can select data to print in the reports with Spec Codes 01 ~ 14 in maintenance
mode.
Note 3) **[SPACE / lb/kg] (?)** key is used to enter exact number of characters of data in selecting group data.
Note 4) **[→]** Key is used to stop printing reports

19. MOVEMENT & THRESHOLD REPORT

Print the today's inventory movement report and threshold reorder report.

TODAY'S MOVEMENT REPORT

All item data which had receiving or shipping transactions today are printed with quantity of total received and shipped. After printing the report, you may clear or hold the daily transactions.

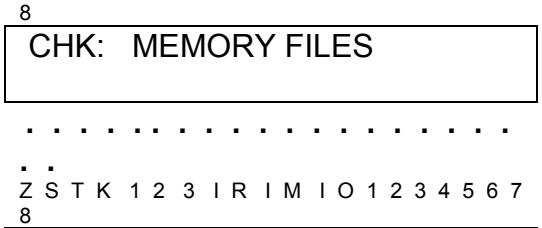
THRESHOLD REPORT

By entering the percentage of minus or positive stock level to the threshold, all items within that target are printed.

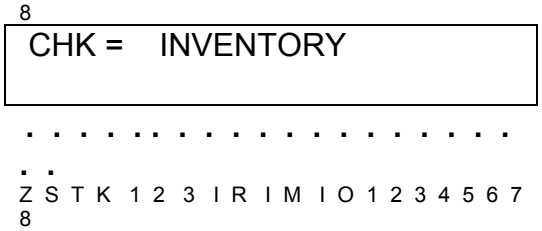
20. OPERATION TO PRINT TODAY'S MOVEMENT REPORT

1. Enter Check mode

2. Press **[∗/Enter]** Key

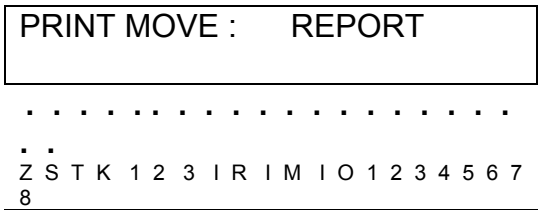


2. Select Inventory with **[TARE←]** or **[UNIT WEIGHT→]** key.

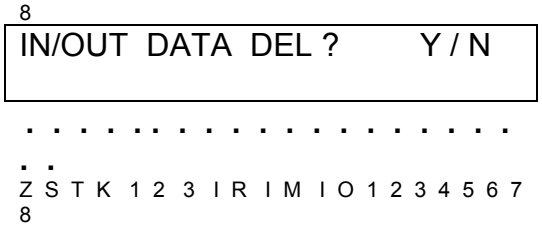


3. Press **[∗/ENTER]** key.

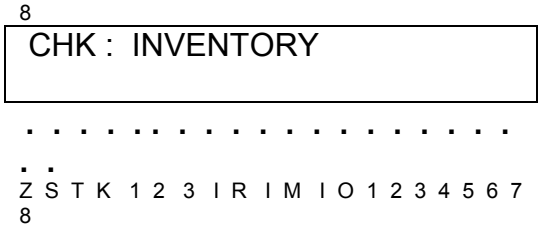
SEARCHING . . .
MOVE : PRINTING



4. Press **[∗/ENTER]** key to print the report.



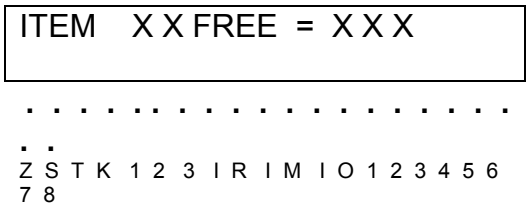
5. Select if you delete the movement data with **[Y]** or **[N]** key.



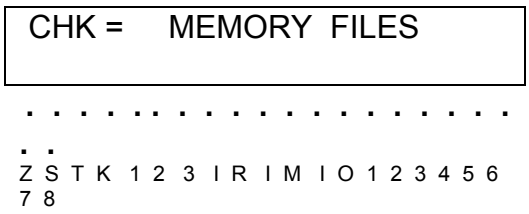
NOTE 1) You can select item data to print in movement report in SPECs 15 ~ 29 (REPORT SPEC) in maintenance mode.
NOTE 2) **[→]** key is used to stop printing the report.

21. OPERATION TO PRINT THRESHOLD REPORT

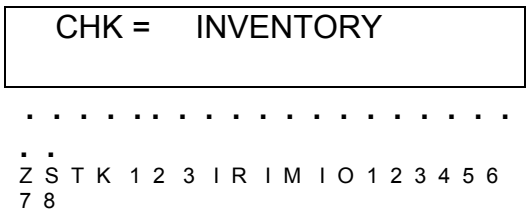
1. Enter Check mode



2. Press **[∗/Enter]** Key

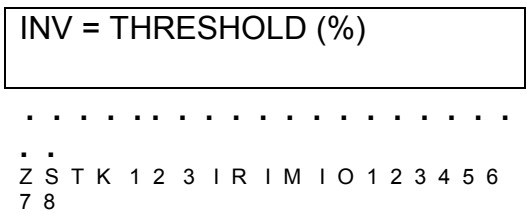


3. Select Inventory with **[TARE←]** or **[UNIT WEIGHT→]** key.

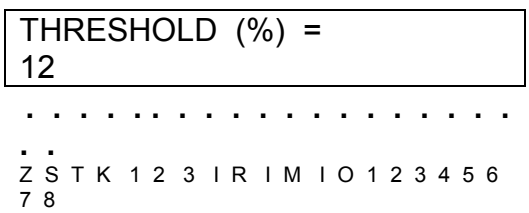


4. Press **[∗/ENTER]** key.

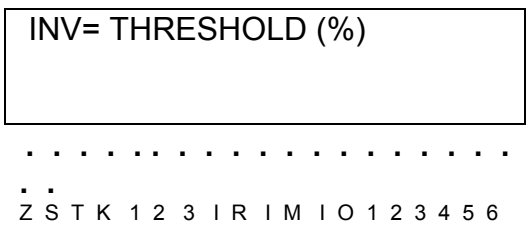
5. Select Threshold with. **[TARE←]** or **[UNIT WEIGHT→]** key



6. Enter the percentage.



7. Select MINUS OR PLUS % to print report with
[–] and **[+]** keys
press **[AUTO/MANUAL]** to escape



NOTE 1) You can select item data to print in threshold report in SPECs 30 ~ 44 (REPORT SPEC) in maintenance mode.

NOTE 2) **[→]** key is used to stop printing the report.

NOTE 3) APPENDIX IV shows the sample of threshold report.

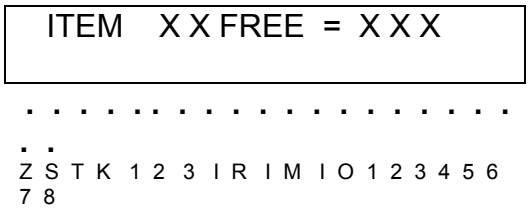
22. SHELF LOCATION LABEL PRINT

By putting shelf location label on the shelf where the stock is short, the collation of part item in picking and stocking works become reliability.

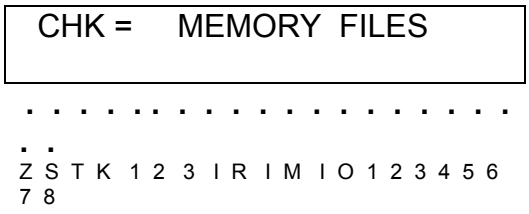
You have to program label format of shelf location label in program mode before printing label.

Operation to print shelf location label

1. Enter Check mode

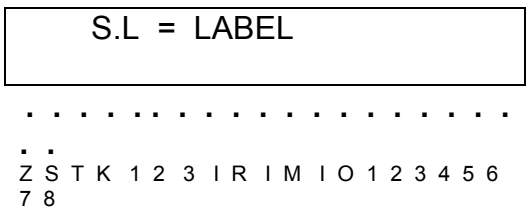


2. Press **[∗/Enter]** Key

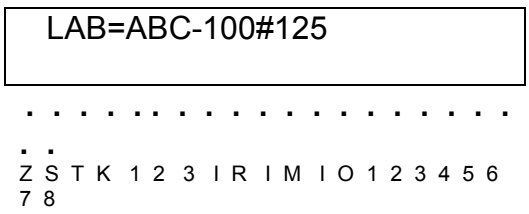


3 Select Location Label with **[TARE←]** or **[UNIT WEIGHT→]** key.

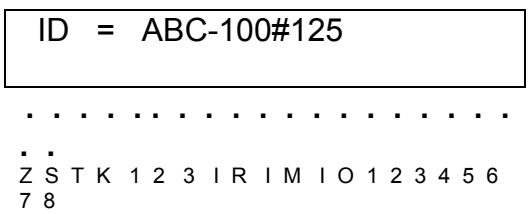
4. Press **[∗/ENTER]** key.



5. Enter ID code.

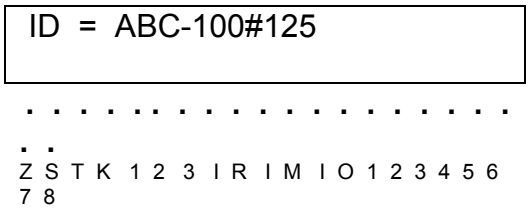


6. Press **[∗/ENTER]** key.



7. Press **[∗/ENTER]** key to print

“ SHELF LOCATION LABEL”



23. MEMORY FILE OUTPUT TO PC

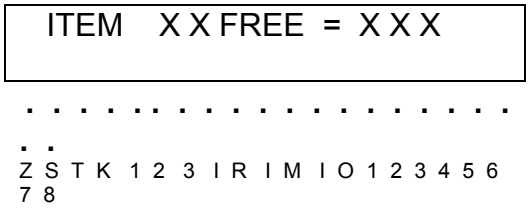
1. RS-232 text output of memory. (Download to spreadsheet)
   (Comma delimited file for use in spreadsheet, etc.)
2. Use Transfer cable plugged into RS-232 DIN (closest to the rear of scale)

<u>On laptop</u>, select Terminal program
Select File, and 150.trm
Select Transfers, Receive Text File, and type a file name.
Press OK

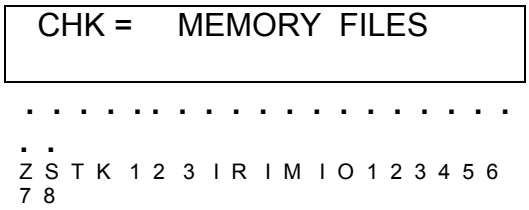
<u>On Scale</u>,
Go to CHECK mode
Press ENTER key twice
Press TARE key once Display will read PC:CK
Press ENTER key, display will show progress

Format: *ID Code, Part No., Part Name, Unit Weight, Location, Inventory, Threshold, Day-In, Day-Out, Tare, Setpoint1, Setpoint2, Scale Select, In-Auto, Out-Auto, Non-Add-Auto*,

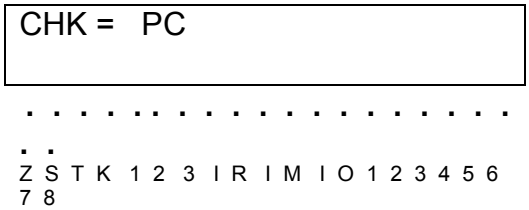
1. Enter Check mode



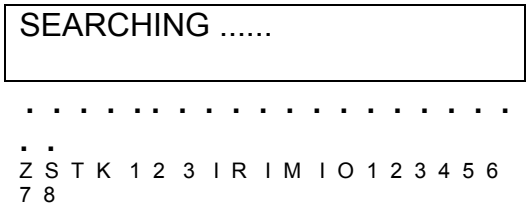
2. Press **[∗/Enter]** Key



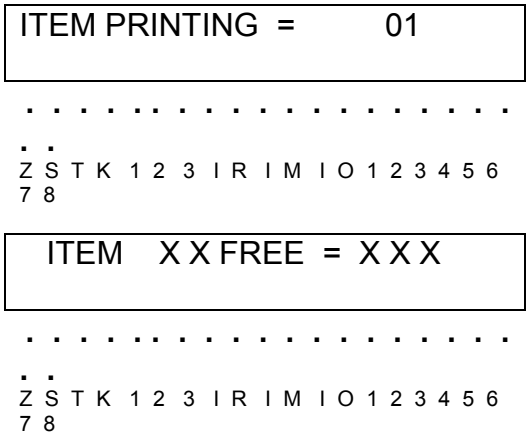
3 Select Location Label with **[TARE←]** or **[UNIT WEIGHT→]** key.



4. Press **[∗/ENTER]** key.



THEN



When output is complete Display returns to

5.0 SPECIFICATION LIST

5.1 PC/AT ALPHANUMERIC KEYBOARD	**page**	**136**
5.2 BARCODE SCANNER SETUP	**page**	**137 - 139**
5.3 RS - 232 COMMUNICATIONS	**page**	**140 - 143**
5.4 SET - POINT OUTPUT	**page**	**144 - 145**
5.5 MODEM COMMUNICATIONS	**page**	**146 - 157**

5.1 PC/AT ALPHANUMERIC KEYBOARD

1. Key Board type
IBM-PC/AT IKEYBOARD (101 KEYBOARD)

2. CONNECTOR SPECIFICATION

2-1. CONNECTOR 5PIN DIN (FEMALE)

2-2. CONNECTOR SIGNAL CHART

PIN NO.	SIGNAL
1	CLOCK
2	DATA
3	-
4	GROUND (SD)
5	5VDC
-	GROUND (FG)

3. COMPARISON LIST OF KEY FUNCTIONS

DC-150	**IBM KEY BOARD**
ALPHABET KEY	ALPHABET KEY
NUMERIC KEY	NUMERIC KEY
MODE	ESC
PART.NO.	F1
P.NAME	F2
LOCATION	F3
INVENT	F4
TH'HOLD	F5
SETPOINT	F6
SCALE	F7
IN	F8
OUT	F9
NON-ADD	F10
DAY-IN	F11
DAY-OUT	F12
NET/GROSS	PRINT SCREEN
ADDRESS	PAUSE

DC-150	**IBM KEY BOARD**
SCALE	NUM LOCK
+	/ (10 KEY)
-	* (10KEY)
PIECES	- (10KEY)
CODE	+ (10KEY)
* (ENTER)	ENTER
SHIFT UP	SHIFT
CLEAR	BACK SPACE
RETRY	↑
TARE	←
U.WEIGHT	→
IN/OUT	HOME
LOT NO.	PAGE UP
LB/KG	PAGE DOWN
AUTO/MANUAL	INSERT

* ✍ When you use [SHIFT UP] key in IBM keyboard, enter the data with depressing [SHIFT UP] key.

5.2 BARCODE SCANNER SETUP

1. GENERAL SPECIFICATIONS

1-1. TRANSMISSION SPEED	4800 BPS (DEFAULT SETTING AT DC-150) 1200 BPS 2400 BPS 9600 BPS 19200 BPS
1-2. DATA LENGTH	7 BIT (DEFAULT) 8 BIT
1-3. PARITY	NONE ODD EVEN (DEFAULT)
1-4 STOP BIT	1 BIT 2 BIT
1-5. COMMUNICATION LEVEL	TTL RS-232C (DEFAULT)

2. HEADER CODE

DATA	BYTE	HEADER
NET WEIGHT	8	0 (30H)
UNIT WEIGHT	8	1 (31H)
QUANTITY	8	2 (32H)
ID CODE	16	3 (33H)
TARE WEIGHT	8	4 (34H)
IN JOB NO.	1	8 (38H)
OUT JOB NO.	1	9 (39H)
NON-ADD JOB NO.	1	7 (37H)
GROSS WEIGHT	8	A (41H)
STATUS	1	B (42H)
DATE & TIME	6	C (43H)
MACHINE NO.	2	D (44H)
LOT NO.	32	E (45H)
SET POINT (W)	6	F (46H)
SETPOINT (Q)	6	G (47H)
SET POINT SUB	6	H (48H)
TOTAL QUANTITY	8	I (49H)
THRESHOLD	8	J (4AH)
INVENTORY	8	K (4BH)
LABELS TO PRINT	3	L (4CH)
PART NO.	32	M (4DH)
PART NAME	32	N (4EH)
MOVEMENT IN	8	S (53H)
TRANSACTION	1	T (54H)
MOVEMENT OUT	8	U (55H)
SHELF LOCATION	8	W (57H)
SCALE SELECT NO.	1	V (56H)

3. SCANNER INPUT

There are 2 ways to input data, with HEADER or without HEADER. In the case of no header, the data will be judged as a parts code.

With header

HEADER	DATA	CR

Without header

DATA	CR

3-1. Communication available in OPERATION mode
The contents are; UNIT WEIGHT, TARE WEIGHT, PART CODE, PART NO., LOT NO., QUANTITY

3-2. Communication available in PROGRAM mode
The contents are; PART CODE, PART NO., COMMODITY NAME, THRESHOLD, INVENTORY, UNIT WEIGHT, TARE WEIGHT, SET POINT, OUT AUTO JOB NO., IN AUTO JOB NO., NON-ADD AUTO JOB NO., SHELF LOCATION, SCALE NO.

4. Z COMMANDS IN OPERATION MODE

Z COMMAND	FUNCTION
Z 0	RE-ZERO
Z 1	PRINT
Z 2	UW-CLEAR
Z 3	PLUS
Z 4	MINUS
Z 5	TARE
Z 6	CLEAR MEMORY
ZS 1	SCALE-1
ZS 2	SCALE-2
ZS 3	SCALE-3

5.3 RS - 232 COMMUNICATIONS

1. GENERAL SPECIFICATIONS

1-1. INPUT/OUTPUT INTERFACE

1-2. SYNCHRONOUS SYSTEM START-STOP TRANSMISSION

1-3. TRANSMISSION SPEED 4800 BPS (DEFAULT SETTING AT DC-150)
1200 BPS
2400 BPS
9600 BPS
19200 BPS

1-4. DATA LENGTH 7 BIT (DEFAULT)
8 BIT

1-5. PARITY NONE
ODD
EVEN (DEFAULT)

1-6 STOP BIT 1 BIT (DEFAULT)
2 BIT

2. CONNECTOR SIGNAL CHART

PIN NO.	DC-150 SIGNAL	PC SIGNAL
1	FG (FLAME GROUND)	FG
2	TXD	RXD
3	RXD	TXD
4	RTS	CTS
5	CTS	RTS
6	DSR (IGNORE)	
7	GND (SIGNAL GROUND)	GND
8	CD (IGNORE)	
20	DTR	DSR

3. HEADER CODE

DATA	BYTE	HEADER
NET WEIGHT	8	0 (30H)
UNIT WEIGHT	8	1 (31H)
QUANTITY	8	2 (32H)
ID CODE	16	3 (33H)
TARE WEIGHT	8	4 (34H)
IN JOB NO.	1	8 (38H)
OUT JOB NO.	1	9 (39H)
NON-ADD JOB NO.	1	7 (37H)
GROSS WEIGHT	8	A (41H)
STATUS	1	B (42H)
DATE & TIME	6	C (43H)
MACHINE NO.	2	D (44H)
LOT NO.	32	E (45H)
SET POINT (W)	6	F (46H)
SET POINT (Q)	6	G (47H)
SET POINT SUB	6	H (48H)
TOTAL QUANTITY	8	I (49H)
THRESHOLD	8	J (4AH)
INVENTORY	8	K (4BH)
LABELS TO PRINT	3	L (4CH)
PART NO.	32	M (4DH)
PART NAME	32	N (4EH)
MOVEMENT IN	8	S (53H)
TRANSACTION	1	T (54H)
MOVEMENT OUT	8	U (55H)
SHELF LOCATION	8	W (57H)
SCALE SELECT NO.	1	V (56H)
ADDRESS DATA	160	P (70H)

4. STATUS DATA OUT

STATUS DATA CONSISTS OF 3 BYTE AS FOLLOWS.

FORMAT

B	**STATUS**	**CR**

B: 42H CR: 0DH

STATUS ; BIT0 ... NET WEIGHT (1: POSITIVE W.T. 0: NEGATIVE W.T.)
BIT1 ... lb/kg (1: LB MODE 0: KG,G MODE)
BIT2 ... WEIGHT STABLE (1: W.T. STABLE 0: W.T. UNSTABLE)
BIT3 ... [*] KEY (1: BY KEY OPERATION 0: OTHERS)
BIT4 ... SET “0” ALWAYS
BIT5 ... SET “0” ALWAYS
BIT6 ... SET “1” ALWAYS
BIT7 ... SET “0” ALWAYS

STATUS DATA WILL BE 40H ~ 4FH.

5. RS-323C OUTPUT

DATA FORMAT

HEADER	**DATA**	**CR**	**HEADER**	.....	**CR**	**LF**

ONE DATA CONSISTS OF “HEADER”, “DATA” & “CR”. “LF” MUST BE ADDED AT THE END AS A TERMINATION CODE OF THE TRANSMISSION.

5-1. Output available in OPERATION mode
The contents are; NET WEIGHT, UNIT WEIGHT, TARE WEIGHT, GROSS WEIGHT, DATE, SCALE NO., OPERATION TASK, QUANTITY, TOTAL QUANTITY, SET POINT, OUT AUTO JOB OPERATION, IN AUTO JOB OPERATION, NON-ADD AUTO JOB OPERATION, STATUS, PART CODE, PART NO., COMMODITY NAME, THRESHOLD, INVENTORY, RECEIVING QUANTITY (TODAY), SHIPPING QUANTITY (TODAY), LOT NO., SHELF LOCATION NO., SELECTED SCALE NO.

6. RS-232C INPUT

There are 2 ways to input data, with HEADER or without HEADER. In the case of no header, the data will be judged as a parts code.

With header

HEADER	DATA	CR

Without header

DATA	CR

6-1. Input available in OPERATION mode
The contents are; UNIT WEIGHT, TARE WEIGHT, PART CODE, ADDRESS CODE, LOT NO., QUANTITY, TEMPORARY

6-2. Input available in PROGRAM mode
The contents are; PART CODE, PART NO., COMMODITY NAME, THRESHOLD, INVENTORY, UNIT WEIGHT, TARE WEIGHT, SET POINT, OUT AUTO JOB NO., IN AUTO JOB NO., NON-ADD AUTO JOB NO., SHELF LOCATION, SELECTED SCALE NO.

7. DC-150 CABLE TO COMPUTER

COMPUTER PIN		FUNCTION	STANDARD COLOR	DC-150 PIN
8	1	DCD	RED	6 & 7
3	2	RD	ORANGE	5
2	3	TD	YELLOW	4
20	4	DTR	GREEN	3
7	5	SG	BLUE	2
6	6	DSR	WHITE	1
	7		-	N/C
	8		*colors*	N/C
	9		*may vary*	N/C
25 PIN "D" FEMALE	**9 PIN "D" FEMALE**			**8 PIN "DIN" MALE**

✍ PINS 6 & 7 ON MALE CONNECTOR ARE JUMPERED TOGETHER

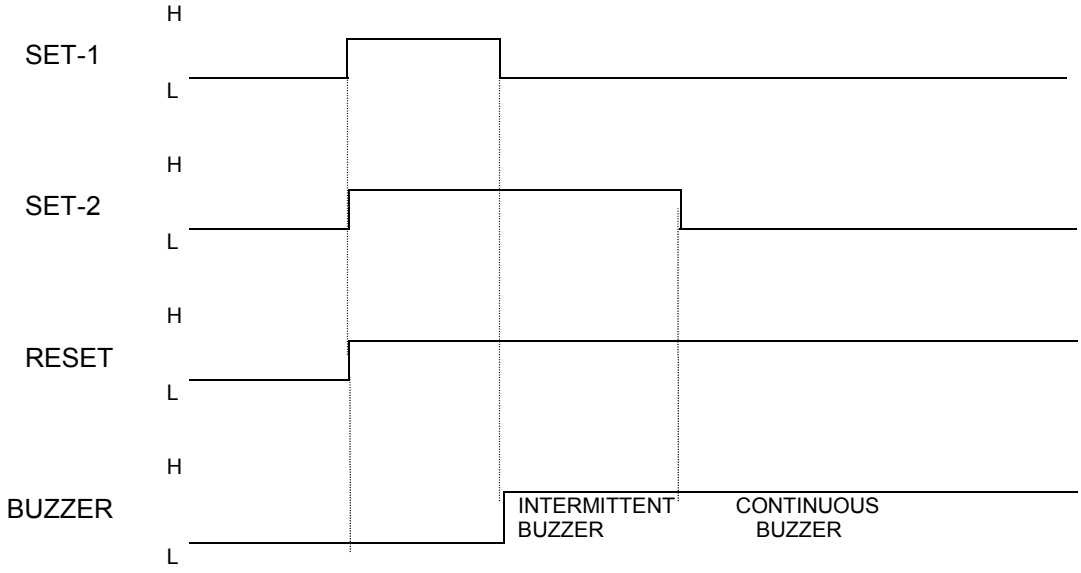
5.4 SET - POINT OUTPUT

1. CONNECTOR SPECIFICATIONS
TCS4480-01-4051 (DIN TYPE)

2. CONNECTOR SIGNAL CHART

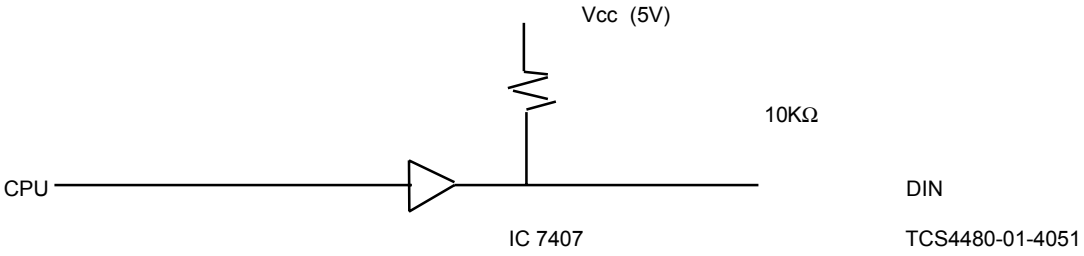
PIN NO.	DC-150 SIGNAL	FUNCTION
1	D-GND	DIGITAL GRAND
2	D-GND	DIGITAL GRAND
3	SET-1	L LEVEL AT INTERMITTENT BUZZER
4	SET-2	L LEVEL AT CONTINUOUS BUZZER
5	SET-3	NO OUTPUT H LEVEL AT POWER ON.
6	NC	
7	NC	
8	NC	

3. SIGNAL WAVE-FORM



4. CIRCUIT DIAGRAM

SIGNAL SET-1, SET-2 and SET-3 are as shown on the following drawing.



5.5 MODEM COMMUNICATIONS

1. TRANSFERABLE ITEMS IN MODEM COMMUNICATION

- SPEC DATA
- PRINT FORMAT
- AUTO JOB OPERATION
- ALL ITEM DATA

2. GENERAL SPECIFICATIONS

2-1. INPUT/OUTPUT INTERFACE RS-232C SERIAL PORT

2-2. ASYNCHRONOUS DATA TERMINAL

2-3. TRANSMISSION SPEED 2400 BPS

2-4. BIT CONSTRUCTION START BIT : 1
INFORMATION BIT : 8
STOP BIT : 1
VERTICAL PARITY : NONE

2-5. COMMANDS REQUIRED FOR MODEM COMMUNICATION

- HAYES STANDARD AT COMMAND SET
- AA AUTOMATIC ANSWER (REF. TO THE FOLLOWING TABLE)
- FULL DUPLEX OVER BOTH DIAL-UP 2 WIRE LINES IN MORE THAN 2400 BPS
- CCITT V.22bis /V.32 /V.32bis

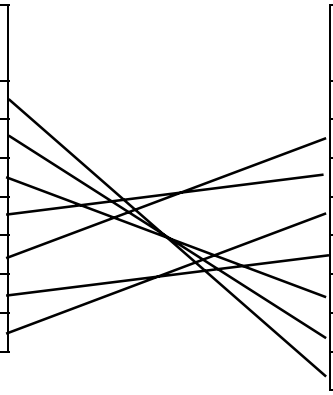
AT COMMANDS REQUIRED FOR MODEM COMMUNICATION WITH DC-150

COMMAND	FUNCTION
DT	DIAL COMMAND (TONE DIAL)
DP	DIAL COMMAND (PULSE DIAL)
E1	CHARACTER ECHO ENABLED
Q1	RETURN RESULT CODE
V0	RETURN RESULT CODE AS NUMBERS
SO=?	SET S-REGISTER SO TO VALUE
X3	DIAL TONE DETECTION DISABLED
&C1	TRACK ACTUAL STATE OF REMOTE MODEM'S CARRIER
&D0	IGNORE DTR (DATA TERMINAL READY) SIGNAL

NOTE) ✍ IT IS POSSIBLE TO SELECT THE DIAL CALL (TONE DIAL/ PULSE DIAL AT ADDRESS 01 IN MODEM SPEC. IN MAINTENANCE MODE.

3. SERIAL INTERFACE PIN ASSIGNMENTS

PIN NO.	DC-150 SIGNAL
1	DTR
2	S_GND
3	DSR
4	RXD
5	TXD
6	CTS
7	RTS



PIN NO.	MODEM SIGNAL
1	FG
2	RXD
3	TXD
4	CTS
5	RTS
6	DTR
7	SG
20	DSR

CONNECTOR AT DC-150 SIDE : 8PIN DIN
CONNECTOR AT MODEM SIDE :25PIN D-SUB

4. TRANSMISSION CONTROL

4-1. DC-150 ↔ MODEM CONTROL (DEFAULT SETTING, TRANSMITTING DIAL COMMAND, DISCONNECTING DIAL CONNECTION)

AT COMMAND SET

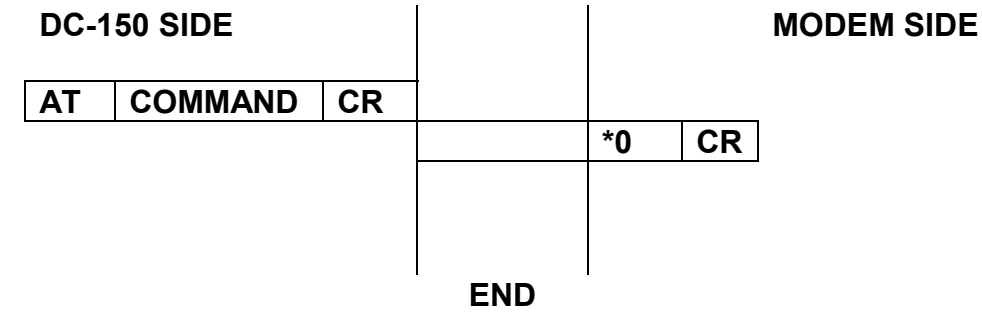
4-2. DC-150 ↔ DC-150 (AFTER DIAL CONNECTION)

CONTROL CHARACTER

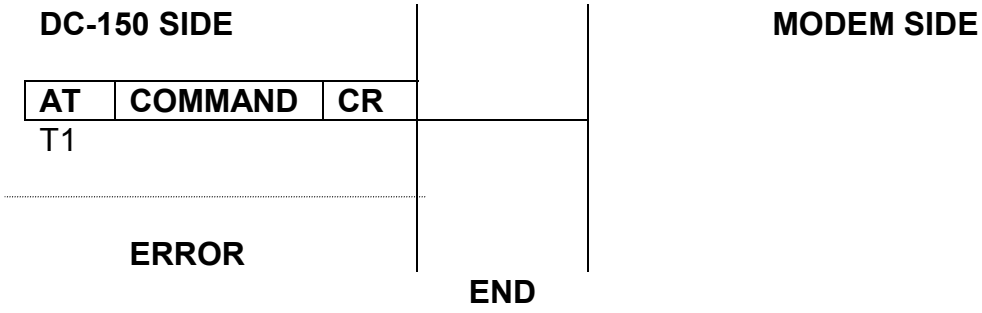
STX (02H)	START TEXT
ETX (03H)	END TEXT
EOT(04H)	START TRANSMISSION
ENK (05H)	END TRANSMISSION
ACK (06H)	POSITIVE RESPONSE
NAK (15H)	NEGATIVE RESPONSE

5 DC-150 ↔ MODEM CONTROL (AT COMMAND SET)

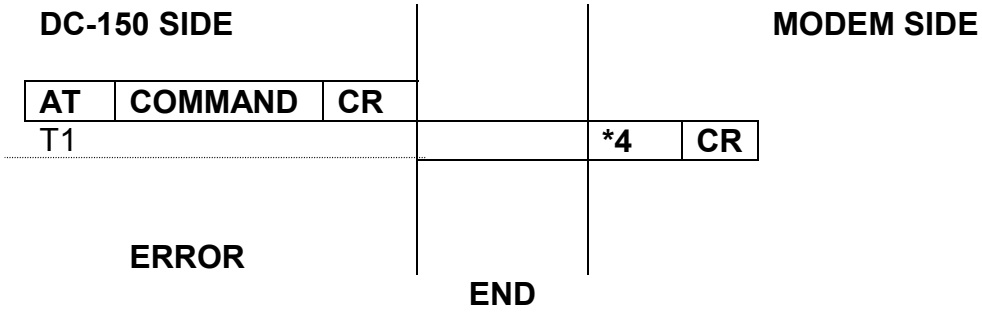
5-1 : SEQUENCE AT DEFAULT SETTING (NORMAL CONDITION)



5-2 : SEQUENCE AT DEFAULT SETTING (TIME-OUT ERROR AFTER SENDING COMMAND)

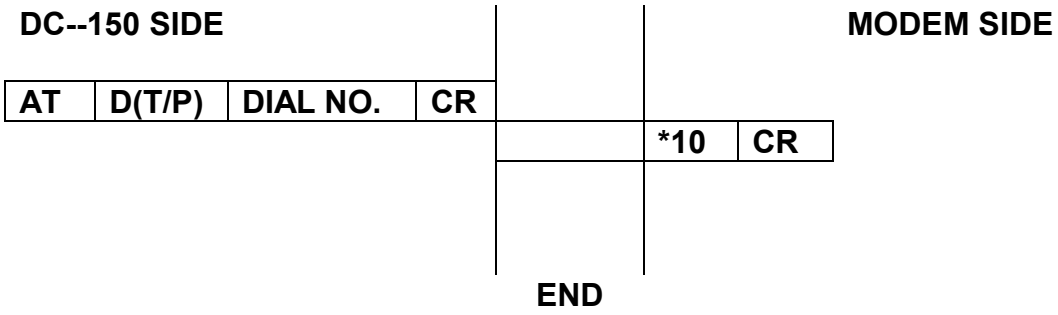


5-3 : DEFAULT SETTING SEQUENCE (ERROR RESULT AFTER SENDING COMMAND)

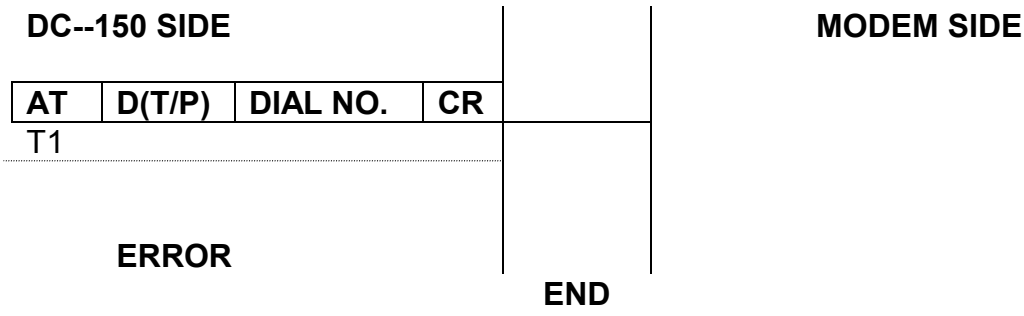


NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ RESULT CODE = 0:OK , 4: ERROR
NOTE 3) ✍ ALL THE DATA ARE ASCII CODE

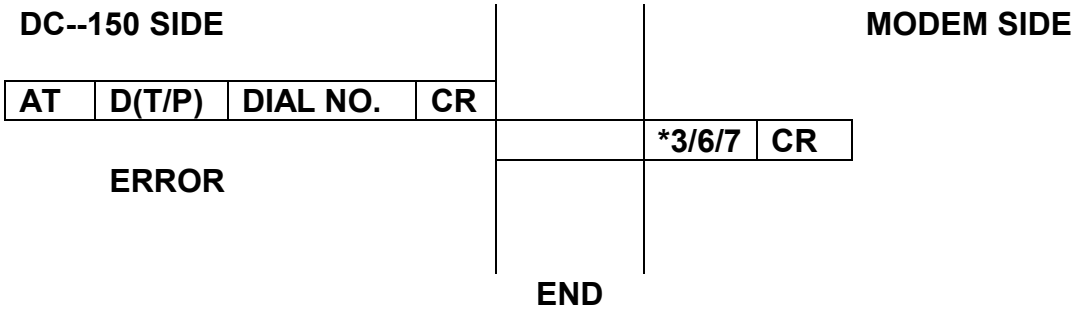
5-4 : TRANSMITTING DIAL COMMAND (NORMAL)



5-5 : TRANSMITTING DIAL COMMAND (TIME-OUT)

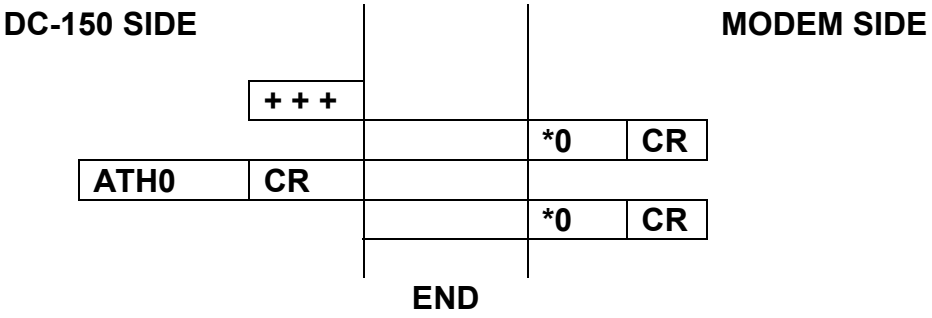


5-6 : TRANSMITTING DIAL COMMAND (ERROR RESULT FROM MODEM)

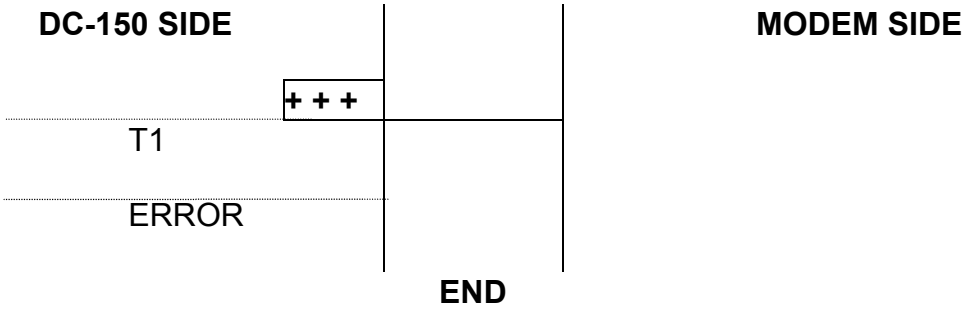


NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ RESULT CODE = 10 : CONNECT 2400 , 3: NO CARRIER /
6: NO DIALTONE / 7: BUSY
NOTE 3) ✍ ALL THE DATA ARE ASCII CODE

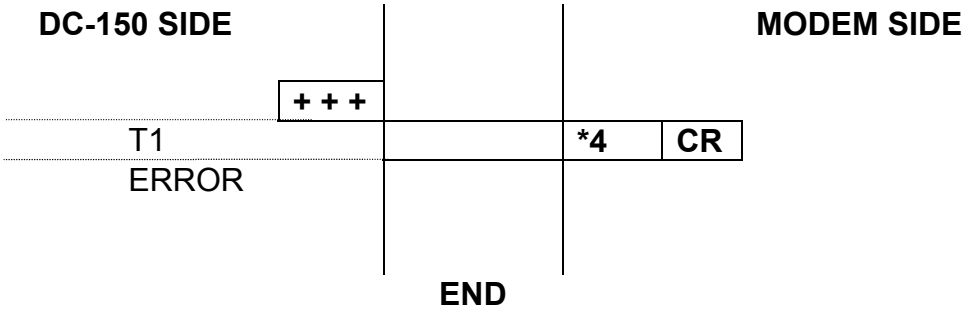
5-1 : SEQUENCE AT DISCONNECTING DIAL CONNECTION (NORMAL)



5-1 : SEQUENCE AT DISCONNECTING DIAL CONNECTION (TIME-OUT ERROR)



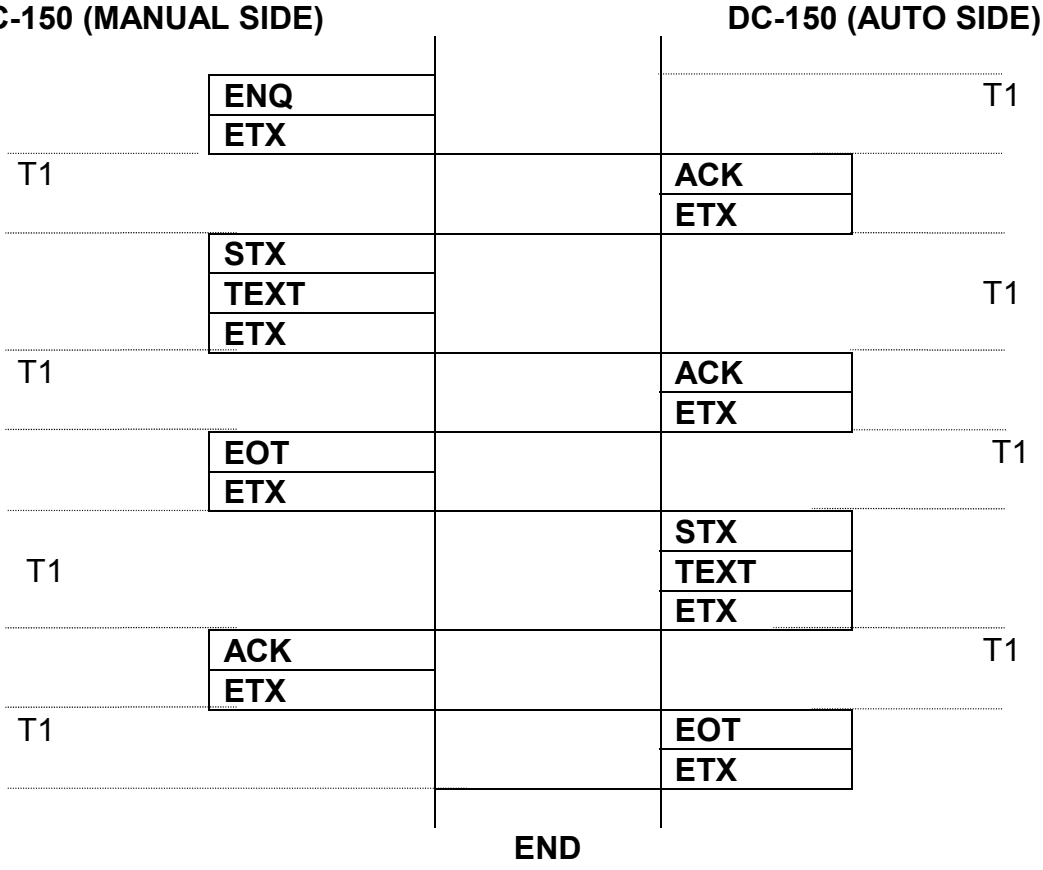
5-1 : SEQUENCE AT DISCONNECTING DIAL CONNECTION (ERROR RESULT FROM MODEM)



NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ RESULT CODE = 0:OK , 4: ERROR
NOTE 3) ✍ ALL THE DATA ARE ASCII CODE

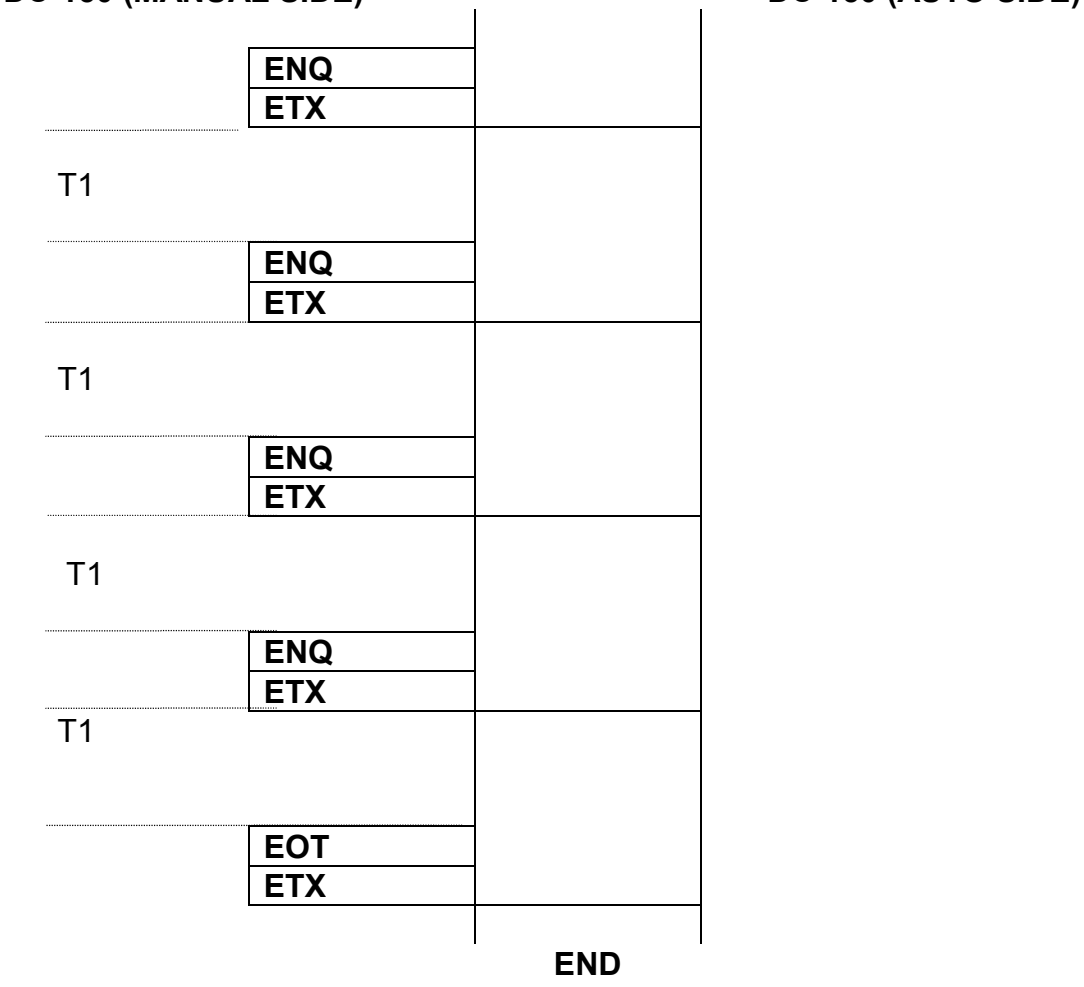
6. DC-150 ↔ DC-150 (AFTER DIAL CONNECTION)

6-1 GENERAL SEQUENCE



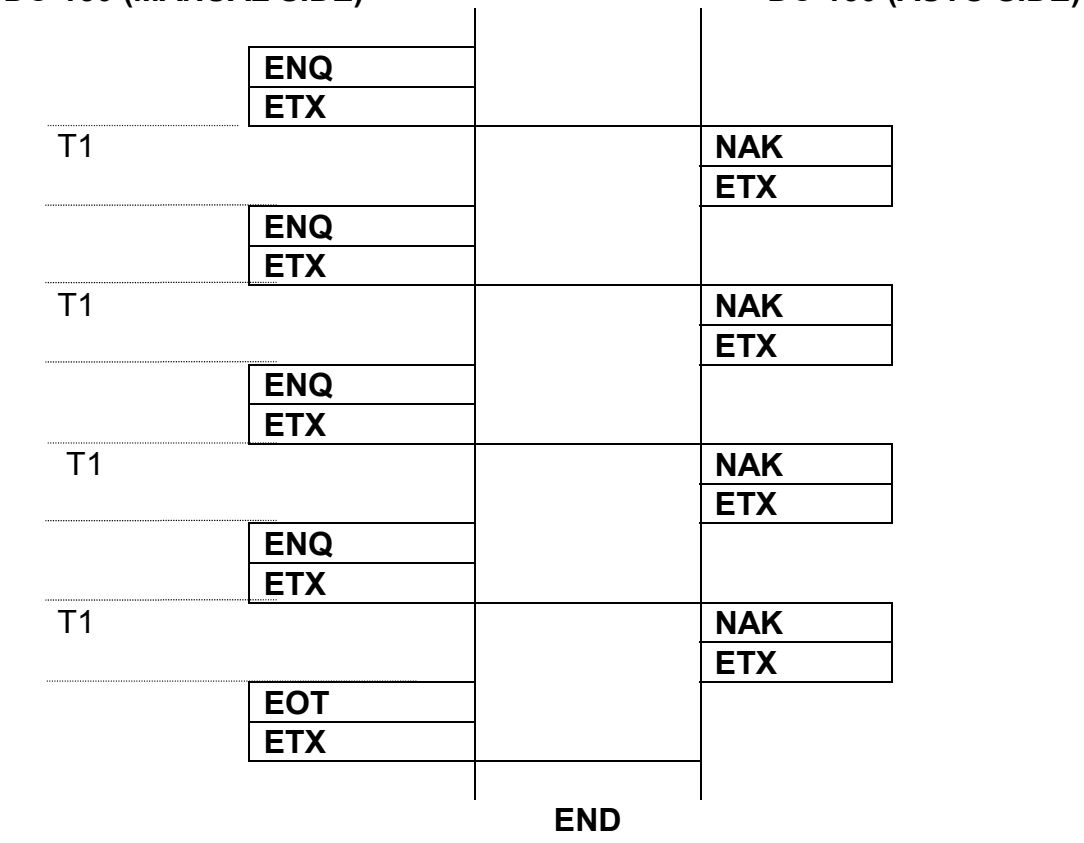
NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ ALL THE DATA ARE ASCII CODE

6-2 TIME-OUT ERROR AFTER TRANSMITTING ENQ



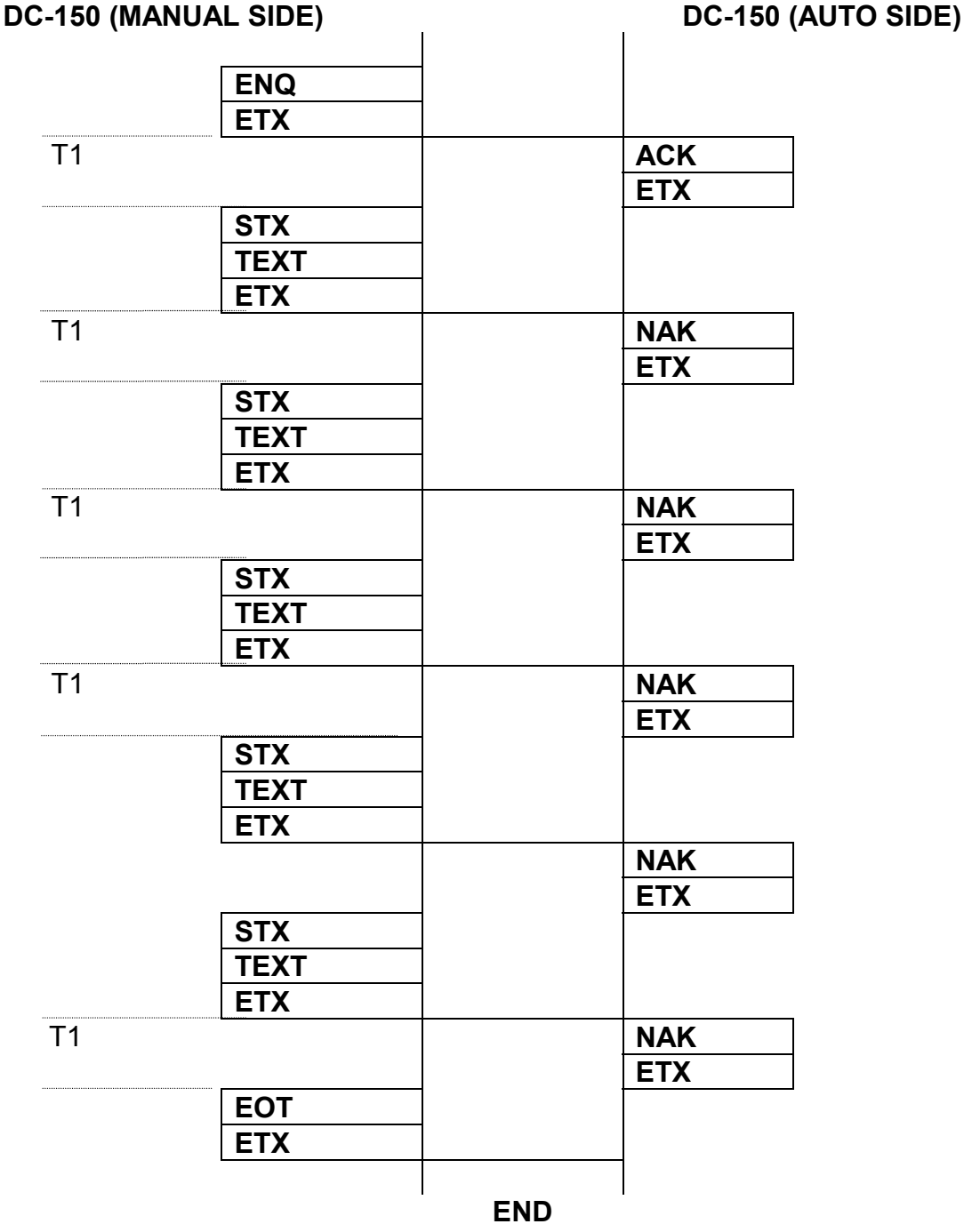
NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ ALL THE DATA ARE ASCII CODE

6-3 RECEIVING NAK AFTER TRANSMITTING ENQ



NOTE 1) ✍ T1 (WAITING TIMER) = 30SEC
NOTE 2) ✍ ALL THE DATA ARE ASCII CODE

6-4 RECEIVING NAK ON RE-TRANSMITTING TEXT



NOTE 1) ✍ T1 (WAITING TIMMER) = 30SEC
NOTE 2) ✍ ALL THE DATA ARE ASCII CODE

7. DATA FORMAT

7-1. DATA FORMAT

STX	STATUS	ID	SUB ID	DATA LENGTH	DATA	ETX

STX : START TEXT (1 BYTE)
STATUS : STATUS OF TRANSMISSION (2 BYTES)
ID : ATTRIBUTE OF TEXT (2 BYTES)
SUB ID : (SUB) ATTRIBUTE OF TEXT (THE NUMBER OF ID DATA etc.) (4 BYTES)
DATA LENGTH : DATA LENGTH (THE NUMBER OF DATA DIGITS) (2 BYTES)
DATA : DATA OF EACH ID (256BYTES)
EXT : END TEXT

* ✍ A TEXT IS WITH 268 BYTES IN ALL.

7-2. STATUS DATA
SS : START
RN : RENEWAL
EE : END
OV : MEMORY FULL
EN : NO MEMORY
NN: END OF ALL TRANSMISSION

7-3 LIST OF TEXT ID

DC-150 (MANUAL) ---→ DC-150 (AUTO)

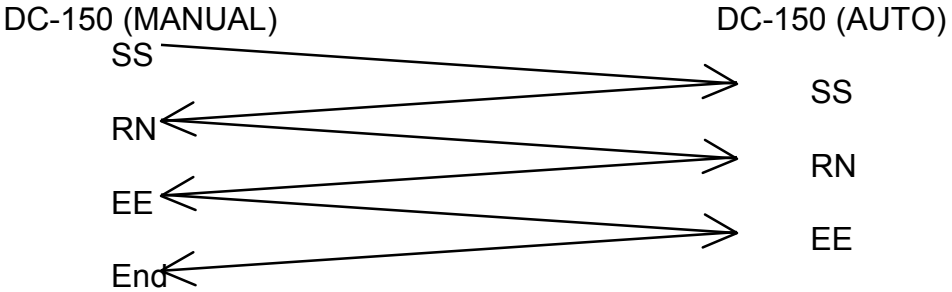
ID	ATTRIBUTE
01	REQUEST SPEC DATA
04	SEND SPEC DATA
21	REQUEST FREE FORMAT DATA
24	SEND FREE FORMAT DATA
41	REQUEST AUTO JOB DATA
44	SEND AUTO JOB DATA
61	REQUEST MASTER (ITEM DATA)
64	SEND MASTER (ITEM DATA)
81	END OF REQUEST
84	END OF SENDING

DC-150 (MANUAL) ←----- DC-150 (AUTO)

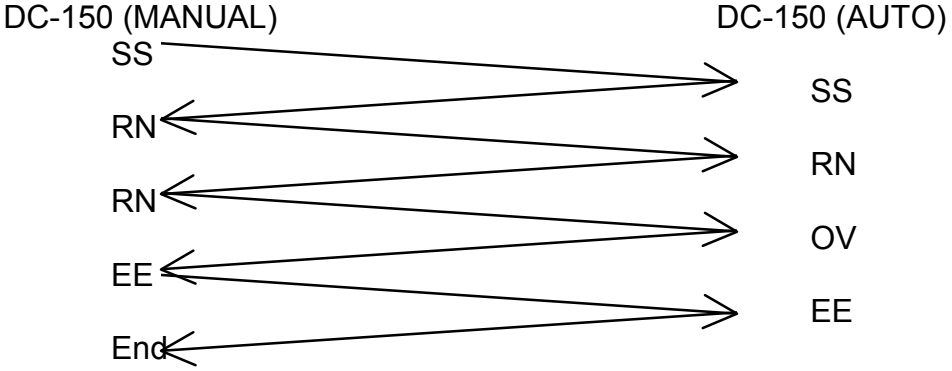
ID	ATTRIBUTE
11	ANSWER TO REQUEST (SPEC DATA)
14	RECEIVE SPEC DATA
31	ANSWER TO REQUEST (FREE FORMAT DATA)
34	RECEIVE FREE FORMAT DATA
51	ANSWER TO REQUEST (AUTO JOB DATA)
54	RECEIVE AUTO JOB DATA
71	ANSWER TO REQUEST MASTER (ITEM DATA)
74	RECEIVE MASTER (ITEM DATA)
91	ANSWER FOR END OF REQUEST
94	ANSWER FOR END OF RECEIVING

7-4. PROCESS OF TRANSMISSION (STATUS DATA)

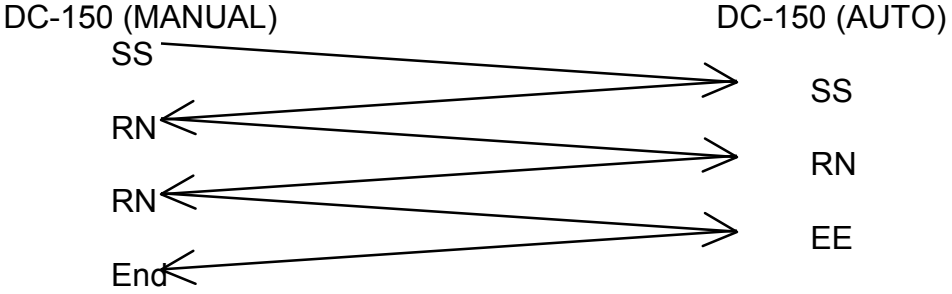
7-4-1: PROCESS ON SENDING DATA (NORMAL)



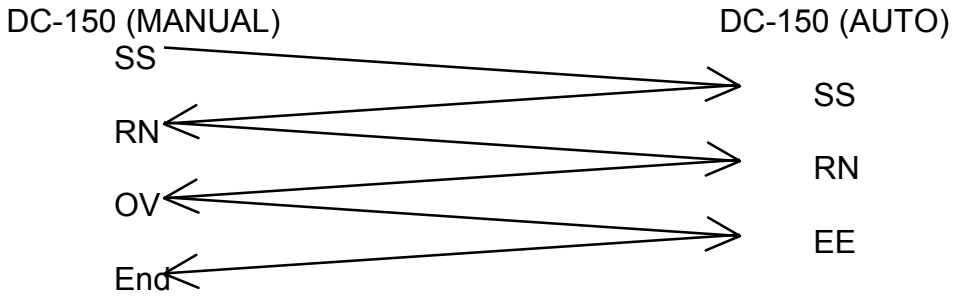
7-4-2: PROCESS ON SENDING DATA (When the memory of receiver machine is insufficient in transmission.)



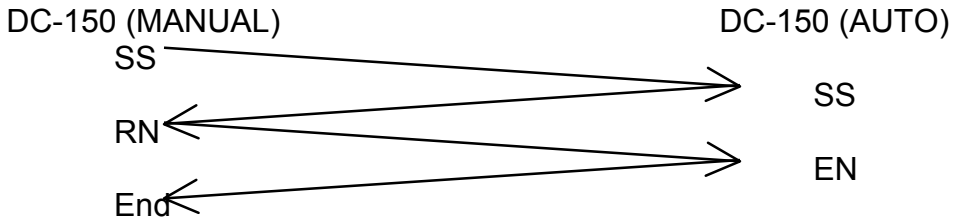
7-4-3: PROCESS ON RECEIVING DATA (NORMAL)



7-4-4: PROCESS ON RECEIVING DATA (When the memory of receiver machine is insufficient in transmission.)



7-4-5: PROCESS ON RECEIVING DATA (When there is no data to receive.)

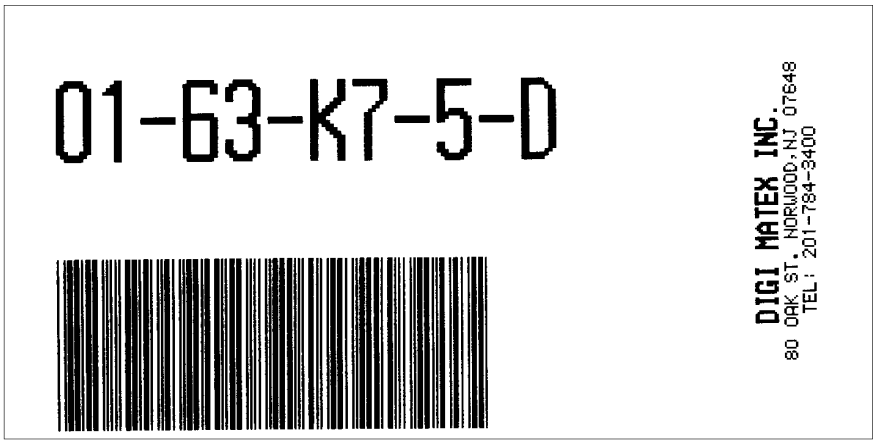


6.APPENDIX

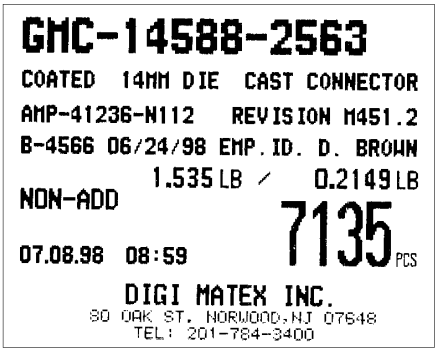
Sample Label Formats and Bar Code labels

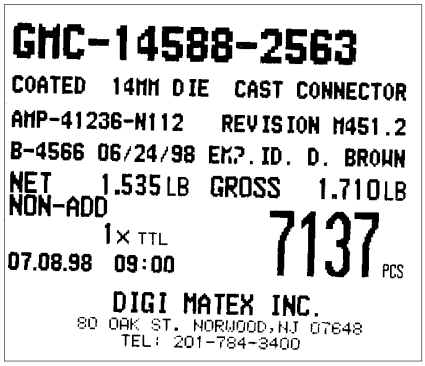
6. 1 Format Layout	**page**	**II**
6. 2 Format Layout	**page**	**III**
6. 3 Format Layout	**page**	**IV**
6. 4 Format Layout	**page**	**V**
6. 5 Format Layout	**page**	**VI**
6. 6 Format Layout	**page**	**VII**
6.7 Format Layout	**page**	**VIII**
6.8 Format Size & Magnification	**page**	**IX**
6.9 Bar Code Print Size	**page**	**X**
6.10 Print Orientation	**page**	**XI**
6.11 Sample Inventory Reports	**page**	**XII - XIII**

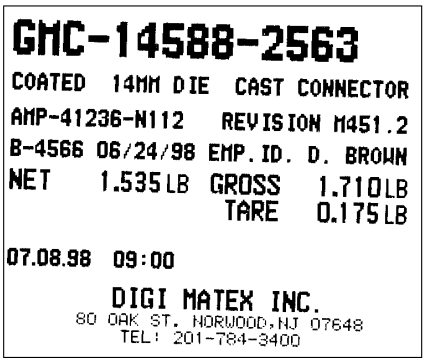
6.1 FORMAT 1 **Standard Format 1**(64mm x 120mm PRINT ANGLE = 270)



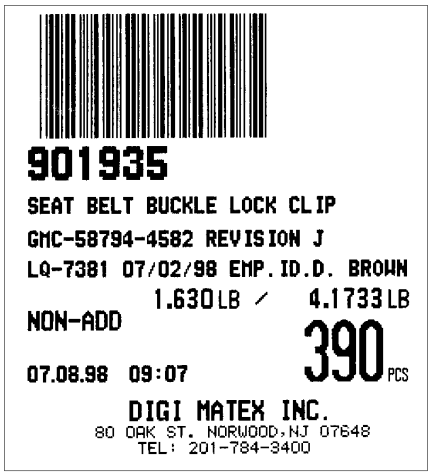
6.2. FORMAT 2 **Standard Format 2**(64mm x 55mm PRINT ANGLE = 0)

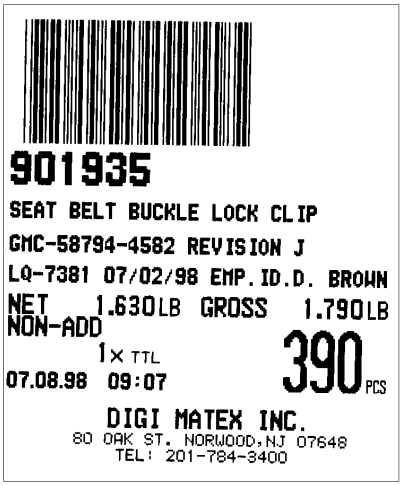


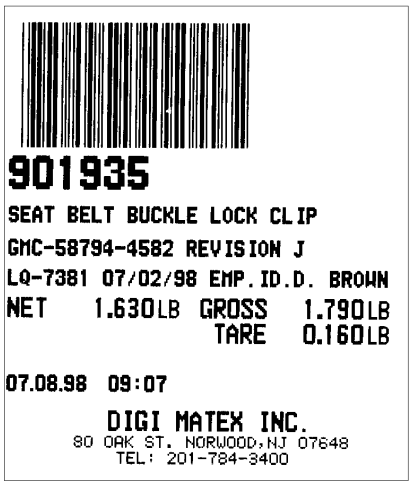




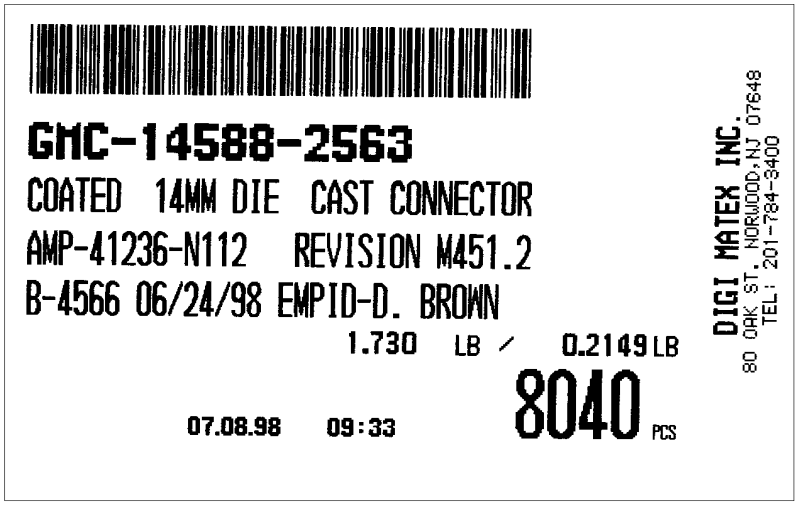
6.3. FORMAT 3 **Standard Format 3**(64mm x 77.5mm PRINT ANGLE = 0)

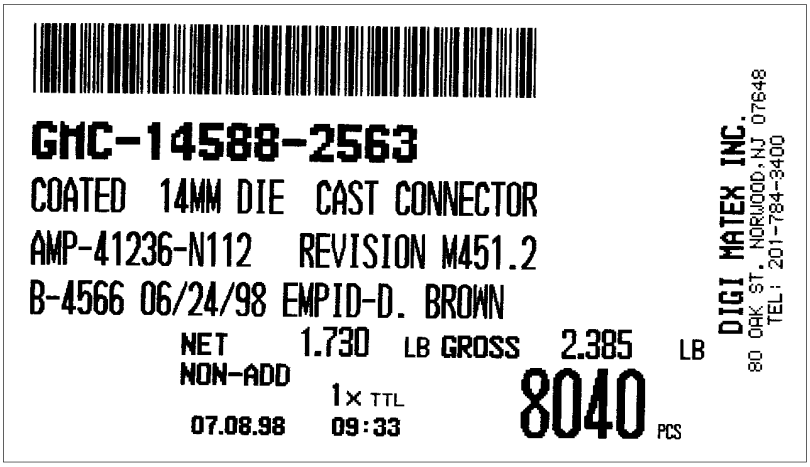


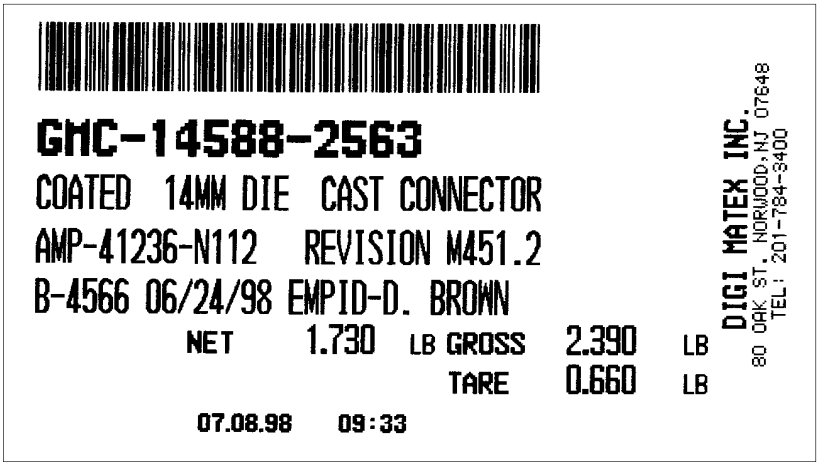




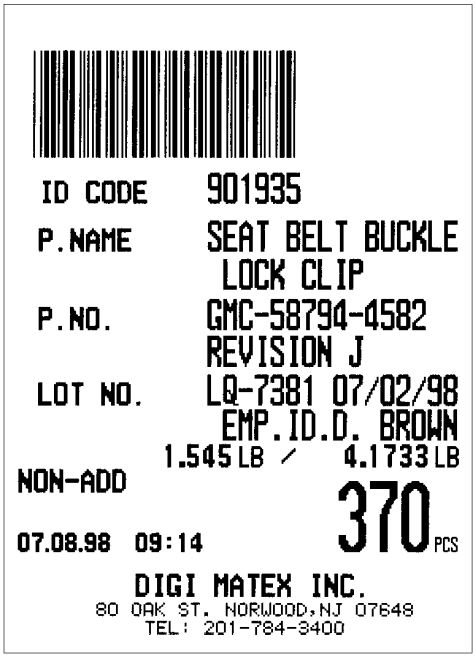
6. 4 FORMAT 4 **Standard Format 4**(64mm x 120mm PRINT ANGLE = 270)

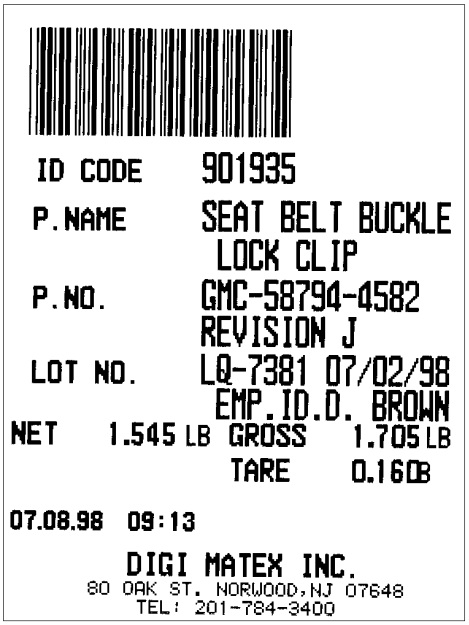


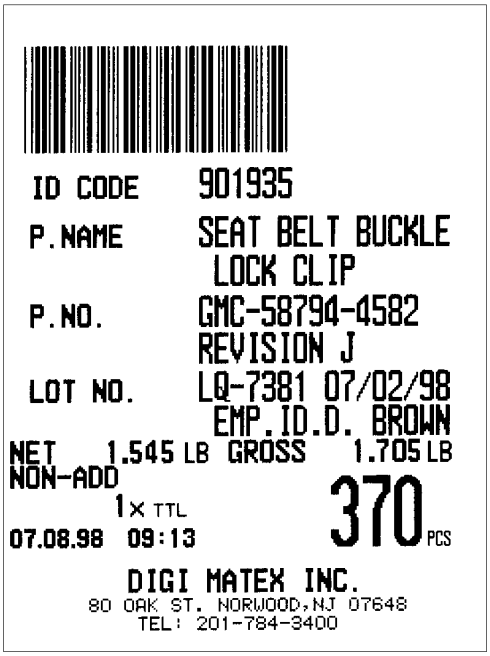




6. 5 FORMAT 5 **Standard Format No. 5** (64mm x 92mm PRINT ANGLE =0)

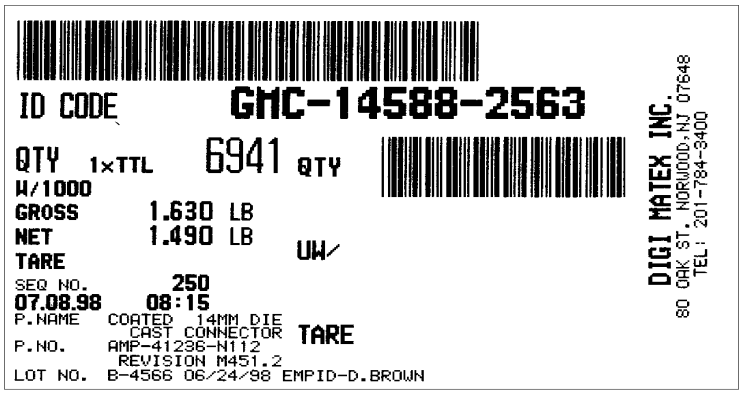


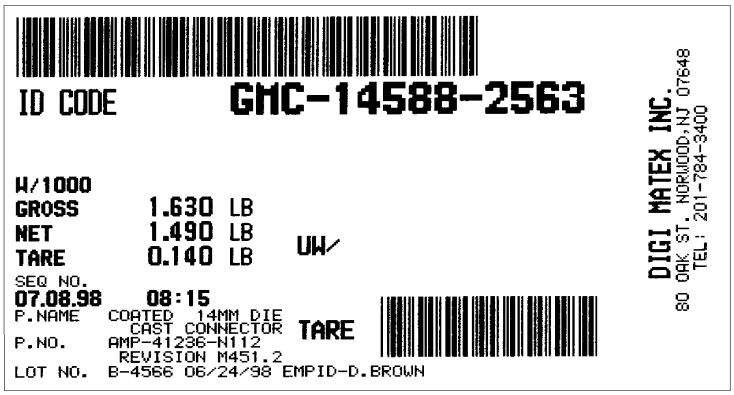




6. 6 FORMAT 6 (Default Label Format)

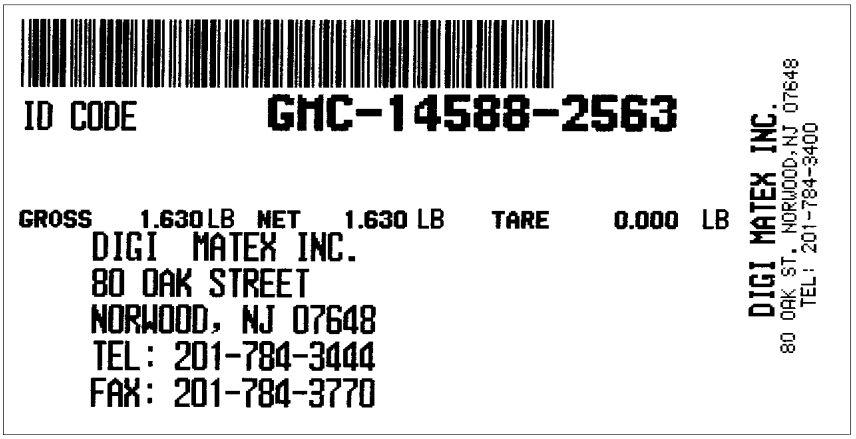
Standard Format No. 6 (64mm x 120mm PRINT ANGLE = 270)





6.7 FORMAT 7 (ADDRESS LABEL FORMAT)

STANDARD FORMAT NO. 7 (64mm x 120mm PRINT ANGLE = 270)



6. 8. FONT SIZE & MAGNIFICATION

CHARACTER SIZE M= MAGNIFICATION

S-0/M-O (5 x 7 dots) **SO/ M-1** **SO/ M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKLMNOPQRSTUVWXYZ123456	ABCDEFGHIJKLMNOP

S-1/M-O (6 x 10 dots) **S-1/M-1** **S-1/M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKLMNOPQRSTUVWXYZ123	ABCDEFGHIJKLMN

S-2/M-O (7 x 12 dots) **S-2/M-1** **S-2/M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKLMNOPQRSTUVWXY	ABCDEFGHIJKL

S-3/M-0 (7 x16 dots) **S-3/M-1** **S-3/M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKLMNOPQRSTUVWXY	ABCDEFGHIJKL

S-4/M-0 (9 x 22 dots) **S-4/M-1** **S-4/M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKLMNOPQR	ABCDEFGHI

S-5/M-0 (14 x 22 dots) **S-5/M-1** **S-5/M-2**

STANDARD	2 Magnification	4 Magnification
	ABCDEFGHIJKL	ABCDEF

6. 9. BAR CODE PRINT SIZE

H. 0 **10 MM**	1.0000 LB
H. 1 **15 MM**	1.0000 LB
H. 2 **20 MM**	1.0000 LB
H. 3 **25 MM**	1.0000 LB
H. 4 **30 MM**	1.0000 LB

6. 10. PRINT O R I E N T A T I O N

6. 11. SAMPLE INVENTORY REPORTS

ALL ITEM

ALL ITEMS

00-00-00 00:55 MACHINE NO. ZZ

ID CODE **ABC-100CP01**

P.NO.	TOYKYO ELECTRONIC-135325750-A123	
P.NAME	CAPACITOR 023-786	
UNIT WEIGHT		999.72
STOCK LOCATION		01-02-03-0-4
INVENTORY		52889
THRESHOLD		10000
IN COUNT		24680
OUT COUNT		22141
TARE		3.80
SET POINT	50000	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

ID CODE **CARBON-6879**

P.NO.	TOKYO ELECTRONIC-123536429-A043	
P.NAME	BOVER BC (CUST, CM1-4500)	
UNIT WEIGHT		5047.7
STOCK LOCATION		ZZ-ZZ-ZZ-Z-Z
INVENTORY		1793
THRESHOLD		2500
IN COUNT		0
OUT COUNT		207
TARE		125.00
SET POINT	300	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

ONE ITEM

ONE ITEM

00-00-00 00:55 MACHINE NO. ZZ

ID CODE **ABC-100CP01**

P.NO.	TOYKYO ELECTRONIC-135325750-A123	
P.NAME	CAPACITOR 023-786	
UNIT WEIGHT		999.72
STOCK LOCATION		01-02-03-0-4
INVENTORY		52889
THRESHOLD		10000
IN COUNT		24680
OUT COUNT		22141
TARE		3.80
SET POINT	50000	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

GROUP

ACCORDING GROUP

CAPSULE-????

00-00-00 00:56 MACHINE NO. ZZ

ID CODE **CAPSULE-1200**

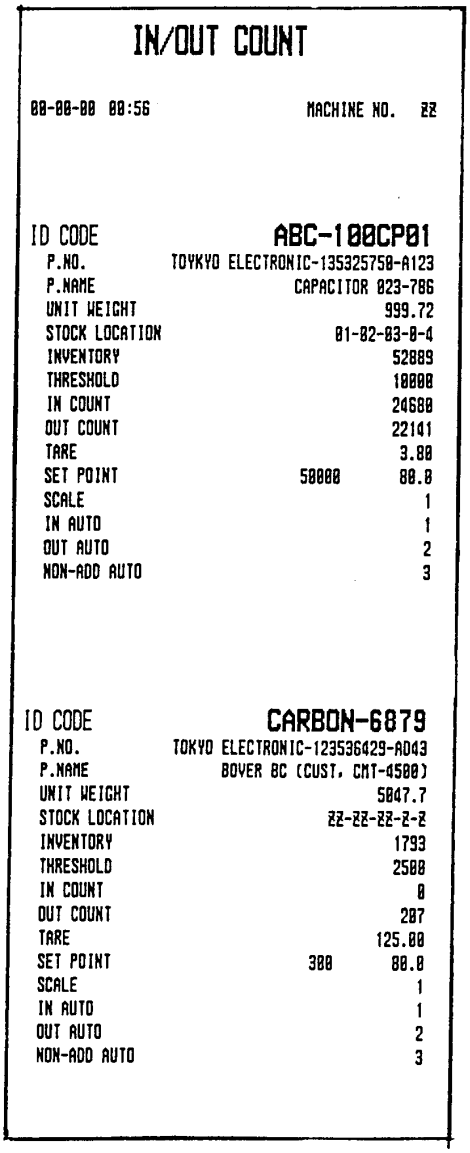
P.NO.	TOYO INC., E5-784-Q1	
P.NAME	BRACKET AG(CASE 235-15-6891	
UNIT WEIGHT		9731.1
STOCK LOCATION		00-00-00-0-0
INVENTORY		21461
THRESHOLD		1000
IN COUNT		
OUT COUNT		1539
TARE		6.0
SET POINT	30000	25.0
SCALE		2
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

ID CODE **CAPSULE-1250**

P.NO.	TOYO INC., 4561-3R4-5R	
P.NAME	BRACKET AP (INTF SUPPORT1232-53	
UNIT WEIGHT		1389.4
STOCK LOCATION		00-00-00-0-0
INVENTORY		10000
THRESHOLD		200000
IN COUNT		0
OUT COUNT		0
TARE		5.5
SET POINT	2400	98.0
SCALE		2
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

6. 11. INVENTORY REPORTS(cont.)

TODAY'S MOVEMENT REPORT



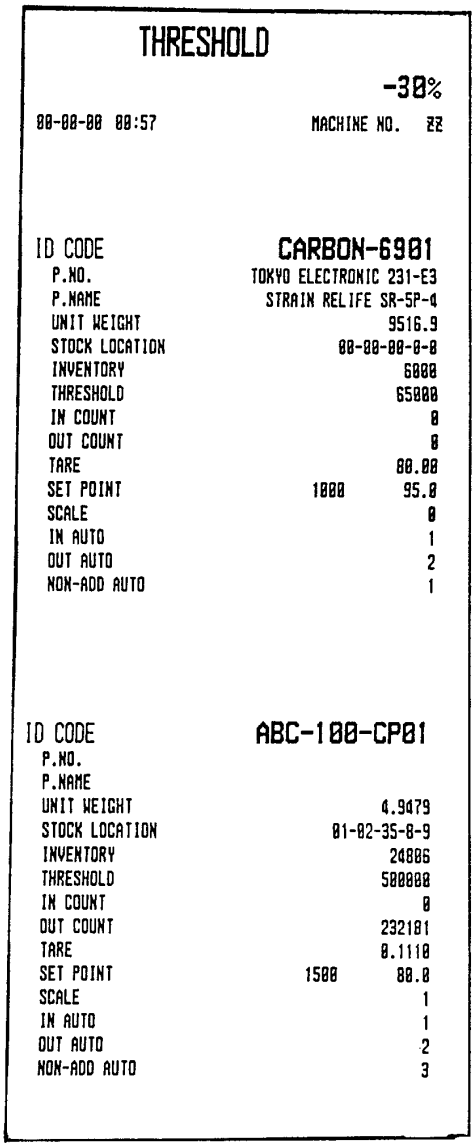
IN/OUT COUNT

00-00-00 00:56 MACHINE NO. ZZ

ID CODE		ABC-100CP01
P.NO.		TOYKYO ELECTRONIC-135325750-A123
P.NAME		CAPACITOR 023-786
UNIT WEIGHT		999.72
STOCK LOCATION		01-02-03-0-4
INVENTORY		52889
THRESHOLD		10000
IN COUNT		24680
OUT COUNT		22141
TARE		3.00
SET POINT	50000	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

ID CODE		CARBON-6879
P.NO.		TOKYO ELECTRONIC-123536429-A043
P.NAME		BOVER BC (CUST. CMT-4500)
UNIT WEIGHT		5047.7
STOCK LOCATION		ZZ-ZZ-ZZ-Z-Z
INVENTORY		1793
THRESHOLD		2500
IN COUNT		0
OUT COUNT		287
TARE		125.00
SET POINT	300	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

THRESHOLD REPORT



THRESHOLD

-30%

00-00-00 00:57 MACHINE NO. ZZ

ID CODE		CARBON-6901
P.NO.		TOKYO ELECTRONIC 231-E3
P.NAME		STRAIN RELIFE SR-5P-4
UNIT WEIGHT		9516.9
STOCK LOCATION		00-00-00-0-0
INVENTORY		6000
THRESHOLD		65000
IN COUNT		0
OUT COUNT		0
TARE		00.00
SET POINT	1000	95.0
SCALE		0
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		1

ID CODE		ABC-100-CP01
P.NO.		
P.NAME		
UNIT WEIGHT		4.9479
STOCK LOCATION		01-02-35-8-9
INVENTORY		24886
THRESHOLD		500000
IN COUNT		0
OUT COUNT		232181
TARE		0.1110
SET POINT	1500	80.0
SCALE		1
IN AUTO		1
OUT AUTO		2
NON-ADD AUTO		3

DC-150 Limited Warranty

Rice Lake Weighing Systems (RLWS) warrants that all RLWS equipment and systems properly installed by a Distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by RLWS. All systems and components are warranted against defects in materials and workmanship for one year.

RLWS warrants that the equipment sold hereunder will conform to the current written specifications authorized by RLWS. RLWS warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, RLWS will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

- Upon discovery by Buyer of such nonconformity, RLWS will be given prompt written notice with a detailed explanation of the alleged deficiencies.
- Individual electronic components returned to RLWS for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in a publication, "Protecting Your Components From Static Damage in Shipment," available from RLWS Equipment Return Department.
- Examination of such equipment by RLWS confirms that the nonconformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; RLWS shall be the sole judge of all alleged non-conformities.
- Such equipment has not been modified, altered, or changed by any person other than RLWS or its duly authorized repair agents.
- RLWS will have a reasonable time to repair or replace the defective equipment. Buyer is responsible for shipping charges both ways.
- In no event will RLWS be responsible for travel time or on-location repairs, including assembly or disassembly of equipment, nor will RLWS be liable for the cost of any repairs made by others.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER RLWS NOR DISTRIBUTOR WILL, IN ANY EVENT, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

RLWS AND BUYER AGREE THAT RLWS'S SOLE AND EXCLUSIVE LIABILITY HEREUNDER IS LIMITED TO REPAIR OR REPLACEMENT OF SUCH GOODS. IN ACCEPTING THIS WARRANTY, THE BUYER WAIVES ANY AND ALL OTHER CLAIMS TO WARRANTY.

SHOULD THE SELLER BE OTHER THAN RLWS, THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIMS.

No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of RLWS and the Buyer.

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